HOSPITAL ABSTRACTS

A MONTHLY SURVEY OF WORLD LITERATURE

PREPARED BY THE DEPARTMENT OF HEALTH

AND SOCIAL SECURITY

VOLUME 18, NO. 3, ABSTRACTS 321-473. MARCH 1978

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HOSPITALS IN GREAT BRITAIN

See Abstract No. 333, 453

HOSPITALS IN OTHER COUNTRIES

See also Abstract Nos. 424

321. BJÖRCK, I. Peru—1977. **[Peru—1977: hospital and health services.]** *Vårdfacket*, Stockholm, 1977, July 7, no. 13, pp. 18-20.

Of Peru's population of 16,000,000, some 1,300,000 people are permanently employed and thereby covered by health insurance. The national budget for 1977 allocated 9.8 per cent to defence and 5.2 per cent to the health service. The number of hospital beds has not been increased by one single unit since 1962, and there is a bed shortage of 20,000. As in the USA, a patient has to pay the full market price for absolutely everything supplied: he (or his family) must *buy* all drip bottles, drips, syringes, medicines etc. used—with the sole exception of certain reduced-price 'basic' medicines. Rich patients do, of course, go to private doctors, of which there are vast numbers in the capital, Lima. In an attempt to distribute the health service a little more equitably, the military government introduced the Secigra system in 1968, whereby newly qualified doctors and nurses have to serve for six months in a village health centre. When the current economic crisis is solved, it is intended to build five new general hospitals and 104, 30-bed medical centres. The health centres currently in operation are usually staffed by one doctor, one nurse and an auxiliary, serving a population of 50,000 people. The nurse's starting salary for a seven-hour day is 11,000 soles a month very little, in a country with Western European price levels. A clinic treats on average 50 undernourished children a day: they are given a cash subsidy to buy milk, which they usually have to share with the whole family. The commonest diseases are tuberculosis and intestinal parasites. The article is illustrated with a photograph of a Lima slum and the entrance to a district health centre.

322. Vest-Agder fylkes helseplan. **[The West Agder county health plan.]** *Norsk Sykehustidende*, Oslo, 1977, June/July, vol. 50, nos. 6/7, pp. 132, 134-143.

The West Agder (Lister & Mandal) County health plan was submitted in 1972. After comment by the National Hospitals Council and the Department of Social Services, it has been passed by the Prime Minister's office and given Crown approval. The county (pop. 138,000) is to be served by one Type I county hospital, Kristiansand Central Hospital, including the Southern Rheumatism Hospital and Kongsgaardheim special hospitals. The hospital will perform central hospital functions for the whole of the county plus portions of East Agderm and local hospital functions for Kristiansand, Vennesla, Sogndal and Søgne. The local hospitals in Mandal, Farsund and Flekkefjord will be Type II county hospitals; and Kristiansand alcoholics' clinic will comprise a

special hospital. Another cerebral paresis home (or department), will be established additional to the Toppenhaug home shared by both Agders. There are to be 20 local authority nursing homes (including old people's homes); no cottage hospitals (*Sykestuer*) and no maternity clinics. Two schools will be made available for the mentally handicapped, and the cripples' home will be shared by two other counties. Nine county and district psychiatric institutions will cover requirements for all ages.

323. Services de santé au Japon. **[Health services in Japan.]** *Revue Hospitalière*, Paris, 1977, Oct., vol. 41, no. 304, pp. 737-742.

On the occasion of the 20th International Hospital Congress held in Tokyo in May, 1977, a summary is presented of health service provision in Japan. Provision is fragmented, the central government being responsible for public health, school medical services, and industrial medicine. Most of the population is covered by health insurance schemes, employees contributing 3.75 per cent of their monthly salary and employers another 3.75 per cent towards health insurance. The insurance schemes are generally run by the municipalities. There are one and a half million hospital beds for a population of 111,300,000. Seventy five per cent of hospitals belong to and are run by doctors. The health services in Japan and in Western Europe face similar problems: an ageing population, rising costs, rapid social change, and a shortage of nursing staff.

324. BAUME, P. **Hospitals and relevance, part 1.** *Australian Hospital*, Prahran, 1977, Sept., no. 12, pp. 11-12.

This report is a paper delivered to the Fifth National Congress of the Australian Institute of Hospital Administrators held in Canberra in 1977. The author pinpoints several dilemmas connected with hospitals including the fact that governments spend a great deal of money on hospitals yet are questioning the value received, for, in spite of the great technical advances in health care, health statistics do not improve. Many hospitals are being forced to make changes through pressure from consumers. Hospital planners have too often been guilty of planning for people without planning with them, with the result that provision does not always correspond to need. Within the hospital, the administration process sometimes assumes more importance than dealing with the sick, and questions of cost affect decisions about admissions and treatment. Alternative care, such as post-operative home care, and micro-surgery, are two possible methods of easing the competition for resources. Financing hospitals on the basis of cost rather than value cannot continue.

325. MADDISON, D. **Medicine and hospitals in the 1980's, part 1.** *Australian Hospital*, Prahran, 1977, Sept., no. 12, pp. 13-15.

This report is a paper delivered to the Fifth National Congress of the Australian Institute of Hospital Administrators, held in Canberra in 1977. A great deal of pressure is being brought to bear on the health services by the consumer. This pressure, if properly channelled, can be of great advantage to those services, as many modern treatments need a high degree of patient compliance and responsibility. A clearer classification of what is a health problem and what is not, is required, and doctors must foster preventive medicine through patient education and the development of screening programmes. Further progress in different areas of research will also enable the patient

to do more for himself. The cost of sophisticated equipment and treatment, such as CT scanning and transplant surgery, must be weighed against an impartial appraisal of their benefits.

326. CAYZAC, D. Hospitalisation privée et service public hospitalier: les parlementaires-médecins face au projet de loi portant réforme hospitalière. **[Private hospitals and public hospital services: the reactions of doctors who are members of parliament confronted by the bill on hospital reform.]** *Revue Hospitalière*, Paris, 1977, Aug./Sept., vol. 41, no. 303, pp. 605-707, whole issue.

This is a thesis for a doctorate. The author examines the attitude of private hospitals in France to the draft hospital reform bill of 1970 and the general debate in parliament on this bill. The medical profession is more strongly represented in the French parliament than most other professions, and the author assesses how far the intervention of those doctors who were also members of parliament affected the final text of the bill. He concludes that their main concern was to preserve the private sector in medicine.

327. CHURCHES, R. K. **Cancer Institute—Peter MacCullum Hospital.** *Australian Hospital*, Prahran, 1977, Sept., no. 12, pp. 5-6.

The new Peter McCallum Hospital, built to house the Cancer Institute of Victoria in Melbourne, has been constructed according to a flexible design in order to accommodate both radiation equipment already in situ and any future treatment changes. The process of equipping and staffing the hospital was begun soon after planning was initiated. The design consists of small patient units grouped around general concourses and activity areas. In the out-patient clinic, small waiting lobbies replace large waiting rooms and, throughout the hospital, plans provide for the maximum control of heat, light and noise.

328. LEDOUX, C. Une injustice persistante: la comparaison des secteurs hospitaliers public et privé. **[A continuing injustice: a comparison between public and private hospitals.]** *Hospitalisation Nouvelle*, Paris, 1977, Aug./Sept., no. 62, pp. 30-34.

The author complains that charges in some French public hospitals have been allowed to rise by as much as 40 per cent this year while private clinics have not been allowed to raise their charges by more than 12 per cent. Private clinic charges for maternity cases are now 40 per cent less than those in public hospitals, despite the fact that facilities in the former are superior to those in the latter. There are also too many beds in the public sector, and the occupancy rate is very low in some specialties. Salary increases in the private sector must keep in line with increases in the cost of living while no such restraints affect the public sector. The author uses three graphs and four tables to substantiate his claims.

329. WEVER, A. de. Cliniques Universitaires de Bruxelles: présentation de l'hôpital Erasme. **[University Clinic of Brussels: introducing the Erasmus Hospital.]** *Hôpital Belge*, Bruxelles, 1977, July/Aug., vol. 20, no. 128, pp. 29-32.

The first stage of Erasmus Hospital was completed in October this year with the opening of two units—one, of 27 beds, for medical and surgical gastroenterology, and

another for general medico-surgical cases admitted from the emergency department and out-patient clinics. The originality of the hospital lies in having units where surgeons and physicians will work alongside each other in close co-operation. At the moment there are 44 half-day out-patient clinics in 18 specialities. When the hospital is complete in four years' time it will have 900 beds. Particular care is being paid to creating a welcoming environment for the patients, to team working and personalized nursing care, to the establishment and maintenance of good relations with the outside world and the patient's own doctor in particular.

PLANNING, DESIGN AND CONSTRUCTION

330. POLYTECHNIC OF NORTH LONDON. MEDICAL ARCHITECTURE RESEARCH UNIT. **First phase of an investigation into the education and training needs of health facility planners: report of the study group.** (Research Report No. 1; MARU 5/73) London, Polytechnic of North London, Medical Architecture Research Unit, 1973, 22pp. £0.50

This is a report on the first phase of an investigation into the education and training needs of health facility planners. The aim of the study group was to identify those areas of knowledge within which expertise was required by the various Project Team members in such a way as to facilitate the structuring of a course of education and training. The memorandum to the Health Services Planning Research and Development Steering Committee presents the details of the findings. A key to abbreviations and a planning brief model are included.

DETERMINING SIZE OF HOSPITAL AND BED NEEDS

See also Abstract No. 454

331. MILLER, W. **Monitoring and evaluation in health facility planning.** *World Hospitals*, London, 1977, vol. 13, no. 3, pp. 143-150.

This paper which is in three parts proposes the development of an integrated set of tools for monitoring and evaluating the allocation and use of health care resources. The first part, the role of monitoring and evaluation, presents some of the reasons why the author believes such a process to be a fundamental prerequisite to planning and management. The second part, developing a simple monitor of health facility space use, describes the embryonic development and application of such a system during the planning of the Winnipeg Health Sciences Centre and serves to illustrate the kinds of management tools and processes considered. The final part discusses some of the components and characteristics of an integrated monitoring and evaluation system for health facility planning and resource allocation. The paper is intended as a basis for discussion and there are no specific conclusions or recommendations. Several diagrams are included.

HOSPITAL DESIGN

332. RAWLINSON, C. **The development of a classification framework for selecting case study hospitals.** (Working Paper No. 1; MARU 2/76) London, Polytechnic of North London, Medical Architecture Research Unit, 1976, 23pp. £0.50

The aim of this working paper is to produce a short list of potential case study hospitals. The working paper is in two sections: section 1 examines briefly the role of case studies within the framework of the research project as a whole; and section 2 derives a theoretical framework within which hospitals can be classified. Aspects covered by section 2 include: selection methods; classification criteria; selection framework; and choice of case study hospitals. A recommended list of case study hospitals is included.

333. WEEKS, J. **Hospitals.** *RIBA Journal*, London, 1977, May, vol. 84, no. 5, pp. 187-189.

The British Department of Health and Social Security is probably unique among government agencies in that during the period 1952 to 1977 it has developed very positive policies about the design of the buildings for which it is responsible. This has led to a recognizably British approach to the design of hospitals. The effect of this 'patronage' is evaluated. It is seen as largely beneficial, though there has been some frustration due to the strict cost limits imposed. The programme has helped the export of British expertise in health planning, but present financial restrictions may have an adverse effect on this export market. If the market is to be maintained and expanded, cheapness of product cannot alone be relied upon; it must be remembered that a measure of excellence is still highly regarded in the world. Plans and photographs of several recent British hospitals are included.

DESIGN OF INDIVIDUAL GENERAL HOSPITALS

334. **York District Hospital: building study.** *Architects Journal*, London, 1977, June 1, vol. 165, no. 22, pp. 1021-1036.

Design of York District Hospital began in 1967 and the first patients moved into it at the end of November 1976; the transfer of patients and staff from several old hospitals in York was completed at the end of January 1977. A brief outline of the design, structure, and engineering services plus a general description of the hospital is given. An appraisal of the design is presented under the headings: design concept; objectives; the building; the structure; engineering services; hospital street; appearance; wards; and the departments. A summary of cost elements and a cost analysis are given. Plans and photographs are included.

335. WOODS, L. R. **Planning the Kashan Hospital—a case history.** *World Hospitals*, London, 1977, vol. 13, no. 3, pp. 135-138.

In November 1974 the author was appointed to do the programming and functional planning of a 300-bed general hospital complete with out-patient facilities at Kashan, Iran. Later the bed capacity was raised to 400 for the first target year, with the possibility of expanding to 600 for the second year. In this narrative-type paper, he

explains how he and his colleagues went about the job, commenting on the methods used and the difficulties encountered before the final, successful, detailed design was settled and accepted. The design eventually came to be the prototype for the 24, 400- and 600-bed hospitals to be built in a two-year programme in Iran. The need to design for few professional staff and unlimited numbers of unskilled staff meant that sophisticated systems could not be used. Nursing units had 36 beds, one-third in single rooms, the remainder in double and four-bed rooms. Steps in the planning progress included: administrative guidelines; systems selection; architectural programme of areas; master plan studies; relationship studies; and design development.

DESIGN OF SPECIAL HOSPITALS OR UNITS

See also Abstract No. 460

336. **Bronx Developmental Center, New York, N.Y.: architecture cross-examined.** *Progressive Architecture*, Stamford, Conn., 1977, July, no. 7, pp. 43-54.

This 354-bed facility for the mentally handicapped is a four-storey building built around a large courtyard open at one side. Entrance lobby, offices, cafeteria and workshop are arranged in a 563-feet wing along the western edge of the court; along the eastern edge are the residential units, with small dining areas, activity rooms, waiting rooms and doctors' offices. Linking the two is the wing containing the larger recreational spaces—gymnasium, swimming pool and auditorium. The design of the facility is evaluated on three separate levels: (i) with regard to the evolution of an architectural solution to formal, functional and technical problems; (ii) how it operates pragmatically and semantically for its clients and users; and (iii) its consideration in a larger symbolic role—what sort of statement it makes about architecture and about society. Plans and photographs are included.

ENGINEERING SERVICES

ELECTRICAL INSTALLATIONS AND EQUIPMENT

337. Department of Health and Social Security and Welsh Office. **Electrical services: supply and distribution.** (Health Technical Memorandum No. 7) London, Her Majesty's Stationery Office, 1977, 48pp.

This technical memorandum is intended to help those involved in the design of hospital electrical installations. It is applicable primarily to new hospitals and major developments but the principles will also apply when large alterations and extensions to existing electrical installations are planned and to certain other health buildings. Guidance is given on choice of supply and distribution voltages and equipment, utilization circuits together with examples of typical distribution systems, sub-stations and switchrooms. A series of appendices are included covering lightning protection, service ducts, high voltage sub-stations, discrimination and fault conditions, and handling and disposal of askarels containing polychlorinated biphenyls. A list of references to specifications is included.

COMMUNICATION SYSTEMS

338. HOUSE, A. M. and ROBERTS, J. M. **Telemedicine in Canada.** *Canadian Medical Association Journal*, Ottawa, 1977, Aug. 20, vol. 117, no. 4, pp. 386-388.

This paper reviews the current status of the use of telecommunications to enable health care professionals to communicate with each other to improve the qualify of patient care, with particular reference to some Canadian developments. It discusses the relative merits and problems of audio and video systems and some of the issues which will have to be resolved by further studies.

339. DUNN, E. V. and others. **An evaluation of four telemedicine systems for primary care.** *Health Services Research*, Chicago, 1977, vol. 12, no. 1, pp. 19-29.

Four two-way telecommunication systems were evaluated for use in primary care: colour television, black and white television, hands-free telephone, and still-frame black and white television. The study involved more than 1,000 patients seeking care at a community health centre who received an additional remote examination by one of the methods. The diagnoses, clinical tests and X-rays requested, and proposed patient management were compared to the actual care received by the patients at the centre. There were no significant differences between any of the modes in relation to diagnostic accuracy, time for the diagnostic interview, tests requested, or referral rates. Furthermore, patient attitudes did not vary significantly. Thus the relatively inexpensive telephone proved to be as efficient and effective a means for delivery of remote physician care as did any of the visual communication systems.

TRANSPORT IN GENERAL

See also Abstract Nos. 427, 455

340. LANGE, S., STEINBUCHEL, C. and ZIEMANN, W. Methodische AWT-Dimensionierung. **[Methodical design of automatic internal transport systems.]** *Krankenhaus*, Stuttgart, 1977, July, vol. 69, no. 7, pp. 241-278.

This detailed study of automated transport systems for hospitals, prepared by an independent firm of consultants, has been produced in response to a number of enquiries. The whole subject is covered under the following main heads: traffic analyses; getting the dimensions of the main and subsidiary networks; and assessing efficiency. The paper includes many plans, diagrams, charts and tables.

341. COOKE, W. E. **The development of an ambulance service.** *Middle East Health Supply and Service*, Sutton, 1977, Oct., vol. 1, no. 9, pp. 12-15.

The prime task of an ambulance service has been defined as 'to transport patients to and from treatment centres without avoidable deterioration or unnecessary delay whilst ensuring their comfort and wellbeing'. To carry out this task, an ambulance organization needs to be made up of three major ingredients: (i) well-trained staff capable of caring adequately for the patient at the scene of the accident and on the journey to hospital; (ii) a communications system with provision for alerting the service by the public and maintaining contact with the hospital and other services;

and (iii) well-designed vehicles with easy access and good riding qualities and an adequate supply of equipment which is well within the competence of the ambulance staff to use safely.

HEATING

See Abstract Nos. 377, 422

MAINTENANCE OF BUILDINGS AND EQUIPMENT

See also Abstract No. 344

342. DRUE, R. **Five steps to lower costs and improved equipment maintenance.** *Hospitals*, Chicago, 1977, Aug. 16, vol. 51, no. 16, pp. 101-102, 104, 106-107.

This paper outlines field-tested procedures for those who wish to safeguard patients against hazardous equipment at reasonable cost by establishing a biomedical equipment maintenance programme and monitoring its results. It is necessary first to review the existing status and determine the need for improvement. Steps required to identify biomedical service gaps are: (i) conduct a complete inventory and state-of-repair evaluation of all medical equipment; (ii) tabulate overall in-house and outside contract maintenance costs and break them down into plant maintenance, equipment maintenance, safety and general and administrative costs; (iii) focus attention on outside contracts and agreements; (iv) develop a fully detailed understanding of the hospital's outside contract costs; and (v) establish an auditing procedure that is used on a regular basis. Effective communication of new biomedical programme requirements is essential. Biomedical engineers can apply four techniques to improve communications with hospital management: briefly update; avoid technical details; be brief; and justify new programmes.

PIPING INSTALLATIONS

See also Abstract No. 417

343. **Waste anaesthetic gas systems.** *Hospital Engineering*, London, 1977, Oct., vol. 31, no. 8, pp. 19-24.

This paper, from a commercial source, has two aims: (i) to provide information on the 'state of the art' so that an engineer has enough background to know what questions to be asking; and (ii) to show how each installation needs to be tailored to suit its present and future requirements, and the factors to be taken into account. After outlining the background to the problem, it describes in detail the two types of system: passive and active. In general, an active system will be required where there is any equipment which can discharge a large volume of gas. Diagrams of each system are included.

SANITARY EQUIPMENT AND FITTINGS

344. PAYNE, R. **Manholes and inspection chambers—use and construction.** *Hospital Engineering*, London, 1977, Oct., vol. 31, no. 8, pp. 12-13, 16-19.

Traditionally, underground drainage systems for the disposal of both foul and surface water rely upon manholes and inspection chambers to act as collecting points

for the network of pipes likely to be required. This method of design has been developed and perpetuated over the years by various issues of the *Building Regulations* and British Standards and British Standard Codes of Practice. This paper discusses, with special reference to health buildings: design objective; design guidance—manhole covers; design guidance—junctions between drains; recent drainage surveys in health buildings; and design guidance—manhole construction. If the technique of manhole construction described, coupled with good drainage installation, is adopted, it may not be necessary to clean the system at all. Nine photographs and one diagram are included.

EQUIPMENT, FITTINGS, FURNITURE

FLOORS AND FLOOR COVERINGS

See Abstract No. 416

BEDS, COTS, ETC.

345. MARTIN, M. **An airbed you can (almost) make yourself.** *Middle East Health Supply and Service*, Sutton, 1977, Oct., vol. 1, no. 9, pp. 26, 28.

The prototype airbed developed at the Bio-Engineering Centre, Princess Margaret Rose Orthopaedic Hospital, Edinburgh, was assembled for under £60; it is believed that a commercial version can be marketed for £175. The team chose commercially available air mattresses in which all the air-pockets are connected. The mattresses are connected together by tubing and to a standard aquarium aeration pump. A further length of tubing is connected by a T piece, to the air line and the end immersed to a given depth in a container of water. The wooden frame is padded and covered with fire-retardant expanded vinyl. The centre is also working on a tilting chair for people with difficulty in limb movement who would have to be helped into bed. Photographs of the bed and chair are included.

EQUIPMENT GENERALLY

See Abstract No. 340

MEDICAL EQUIPMENT

See Abstract Nos. 342

LABORATORY EQUIPMENT

See also Abstract No. 444

346. GREAT BRITAIN. DEPARTMENT OF HEALTH AND SOCIAL SECURITY and others. **Electrical safety code for hospital laboratory equipment.** London, Her Majesty's Stationery Office, 1977, ii, 39pp. £1.50

This safety code has been drawn up by the Department of Health and Social Security in order to establish adequate standards in the design and construction of laboratory and allied equipment for use in hospitals, with the aim of ensuring in normal

use: (i) safety from electric shock to operators; (ii) safety from overheating and risk of fire in both the equipment and its surroundings; and (iii) the provision of adequate and clearly marked controls. The code covers non-fixed equipment for use in the pathology, pharmacy, dental, ophthalmic and photographic departments. The report considers: reporting of incidents; definitions; tests; safety codes; and compliance. A series of references to standards and an index are included.

ELECTRONIC EQUIPMENT

See Abstract No. 463

STAFF GENERALLY

RECRUITMENT

See also Abstract No. 445

347. KOZA, J. P. Pour une gestion régionale des personnels. **[Staff management on a regional basis.]** *Gestions Hospitalières*, Mantes, 1977, Aug./Sept., no. 168, pp. 585-588, 590-591, 593.

Hospital authorities in France are concerned about the increasing burden of staff costs, but also about staff shortages. Serious consideration should be given to increased productivity. For example, some hospital departments are overmanned for at least part of the year. The author suggests the establishment of a regional programme for job evaluation and workload assessment, and the maintenance of a pool of administrative, medical, and technical staff who would be willing to move temporarily to another hospital within the region to ease short-term imbalances.

348. BJÖRCKS, S. IVA i Norrköping: vi hinner inte vårda patienterna färdigt. **[The intensive care unit in Norrköping hospital: we cannot manage to look after our patients until they are fully recovered.]** *Vårdfacket*, Stockholm, 1977, May 12, vol. 1, no. 9, pp. 4-7.

The intensive care ward at Norrköping was opened in September 1972 with a staff of 13 full-time nurses assembled as a result of an expensive recruiting campaign (See-Your-Home-From-The-Air flights for all applicants). The ward operated successfully for some years but by 1976 there were fewer than 10 full-time nurses (reckoned in hours availability per week). By the end of 1977 there will only be eight full-time nurses left; the remaining hours are covered by part-timers. As a result of the staffing situation, the 16-bed ward, which normally has 13 or 14 patients in at once, had to reduce patient numbers to eight, and to four during the summer holidays. The remaining staff worked for 24 days without breaks during the summer. The management side is alleged to have concealed its reasons for closing beds, leading to criticism of intensive care ward staff by staff on the other wards. In the summer of 1974 the average time spent nursing each of the 13 patients was 62.6 hours per patient; this summer it was down to 40.2 hours for each of the 4 patients. As a result, patients have to be discharged before time to wards which lack the resources to treat them. The management com-

mittee has now announced its intention to establish intensive dialysis and cardiac care units, although the present staff fail to see where future staff is going to come from. The staff have proposed improved creche facilities, and an investigation of the numbers of nurses prepared to train for work on the intensive care wards. The article is illustrated with three internal photographs.

STAFF MANAGEMENT

See also Abstract Nos. 347, 353, 359, 373, 381, 428

349. WEST, D. N. **Communications policy strengthens supervisor-employee relations.** *Hospitals*, Chicago, 1977, Aug. 16, vol. 51, no. 16, pp. 95-96, 98.

Early in 1975, Winter Haven (Fla.) Hospital formalized a communications policy for the entire hospital that consisted of four basic components: small group discussions to be held quarterly in each department; publication of a monthly newsletter written by reporters from every department; an open door policy that would provide access to administration by an employee; and a suggestion box through which staff concerns or ideas could be expressed. This paper describes how the policy was applied in practice in the housekeeping department. The activities included: study by supervisors of leadership skills at sessions with community mental health centre staff; the assistant administrator held weekly structured management discussions with housekeeping supervisors which dealt with specific topics; a quarterly evaluation form was designed that called for the employee's assistance in the evaluation process; an organizational chart covering every employee was placed on the wall in the department; and a 'perfect attendance chart' was developed and 'certificates of appreciation' presented to staff with minimal absenteeism. The results were higher staff morale and decreased absenteeism, while high quality service continued.

STAFF TRAINING

See also Abstract Nos. 354-356, 360-362, 370, 400-401

350. WORLD HEALTH ORGANISATION. **Educational handbook for health personnel,** by J.-J. Guilbert. 4th edition. (Offset Publication No. 35) Geneva, WHO, 1977, 621pp. Sw.fr.28

This is a guide to help health staff acquire the skills of stating educational objectives, planning a curriculum and constructing tests. The book is in five sections: educational objectives; planning of teaching/learning activities; evaluation; tests and measurement techniques; and the organization of a short educational workshop. A glossary of technical terms used in educational and psychological measurement is included together with a short list of references.

351. BONNICI, M. and others. Évolution des écoles de formation du personnel des services de soins. **[Evolution of health services staff training schools.]** *Revue Hospitalière*, Paris, 1977, Oct., vol. 41, no. 304, pp. 753-763, 765-769, 772-779, 782-786.

The authors first review the expansion of the hospital service in France over the past 30 years and show how the hospital training schools have coped with the demand for

more trained nurses and paramedical staff. This has been achieved through expansion and the use of new teaching methods based on the new concepts of patient care and team work. They suggest that the time has come to rationalize the training system and to provide a uniform course of instruction in all schools. Responsibility for training should be placed on the Regions. The costs of training have increased dramatically, and the reasons for this increase and its short- and long-term effects are examined. Finally the authors suggest that a 'training map' similar to the 'hospital map' be designed to ensure that no Region trains too few or two many nurses. Relevant data are presented in nine tables and one graph.

STAFF WELFARE

See also Abstract Nos. 349, 390

352. Internt sikkerhedsarbejde på Rigshospitalet: sikkerhedsarbejdet skal foregå hvor problemerne opstår. [**Occupational safety in the National Hospital and in the Copenhagen District Hospital, Gentofte: the work of the safety committee must start where the problems arise.**] *Sygeplejersken*, København, 1977, June 29, no. 25, pp. 18-21.

The Working Environmental Act, which came into force on July 1, 1977, affects 9,000 full- and part-time staff at Rigshospitalet, whereas the regulations of 1973 only covered the 1,600 non-medical and -nursing staff. Some 60 occupational safety groups are to be set up under a seven-man Safety Committee comprising two nursing and medical staff representatives, two administration representatives, two technical side representatives and a full-time chairman appointed by management. Another committee is currently studying the establishment of the hospital's occupational health service (*Bedriftssundhedstjeneste*). Both committees have been on study tours to Sweden, from where the concept comes. There is general agreement that safety work must commence where safety and health problems arise—in the wards. Staff must contribute by notifying committees about unsuitable working positions, bad backs, inadequate lighting, noise, etc. All committee members will take part in a 40-hour course arranged with the assistance of the Working Environmental Fund. Courses have also been run for the 650 cleaners on infection hazards, working positions, use of materials etc. Other staff groups will be covered in turn.

SPECIAL CLASSES OF STAFF

ADMINISTRATIVE AND CLERICAL STAFF

See also Abstract Nos. 374, 381

353. CHRISTENSEN, E. M. Trojkaledelsen på Bispebjerg Hospital: ansvaret for sygeplejen er placeret. [**A threefold management system at Bispebjerg Hospital: nursing care responsibilities are clearly apportioned.**] *Sygeplejersken*, København, 1977, June 6, no. 26, pp. 4-6.

The collective system of management in charge of Bispebjerg Hospital, consisting of Matron, the Senior Administrative Officer (the Inspector) and a representative of the

consultants, was proposed by the staff in 1970 and introduced in 1975. The Troika meet once a week to discuss any matters of common interest. For many years the hospital has had a consultants' council and a house officers' council; these have now been supplemented by a nursing council, consisting of elected representatives (serving a two-year term) of all the hospital's sisters, nurses, student nurses, and district nurses. The council's task is to meet once a month and to advise the management on professional matters (e.g. new case-note sheets, uniforms, etc.). The management of individual wards is now the formal responsibility of the administrative consultant and the ward sister. In the Troika itself, Matron is directly responsible for nursing in the hospital; this replaces a rather diffuse allocation of responsibility which had developed in the past. The advantage of collective as opposed to divided leadership is that matters under discussion are guaranteed uniform treatment by all categories involved. The decision-making process is significantly speeded up, because decisions are arrived at together instead of having to go through a series of offices with differing interests.

354. WREN, G. R. **Education and practice in hospital and health administration in Canada and the U.S.A.** *World Hospitals*, London, 1977, vol. 13, no. 3, pp. 141-142.

The history of education for hospital administration in Canada and the United States is outlined. Its current functions and roles are briefly described under the headings: master's degree programmes in hospital and health administration; PhD programmes in health administration; undergraduate education in hospital and health administration; and the practice of hospital administration in Canada and the United States.

MEDICAL STAFF

See also Abstract No. 424

355. GENERAL MEDICAL COUNCIL. **Basic medical education in the British Isles: the report of the GMC survey of basic medical education in the United Kingdom and Republic of Ireland, 1975-6.** London, Nuffield Provincial Hospitals Trust, 1977, xviii, 876pp. £14.00

This report of the Survey of Basic Medical Education is in two volumes. The first considers the medical schools of the British Isles as a whole, in general terms, covering such aspects as selection, curricula, and assessment. Profiles of each of the 38 individual medical schools are included in a standard form. Volume two considers the teaching of the component elements of the medical course, subject by subject. The recommendations of the General Medical Council as to Basic Medical Education, 1967, are included as an appendix.

356. MACK, R. E. **How can a community hospital justify educational expenses?** *Hospitals*, Chicago, 1977, Aug. 1, vol. 51, no. 15, pp. 69-70, 72, 74, 76.

This paper presents some guidelines which may be used in the allocation of educational expenses between a university and an affiliated community hospital. It then applies them to the following key elements in affiliation: the educational objectives; additional physical facilities required to meet these objectives; and policies governing the private practice of full-time faculty physicians.

357. TRICE, A. E., editor. **The information needs of the prescribing physician.** *Postgraduate Medical Journal*, Oxford, 1977, Sept., vol. 53, no. 623, pp. 543-566.

This symposium organized by the Association of Information Officers in the Pharmaceutical Industry brought together the users of drug information, prescribing physicians, and the various providers of drug information for mutual discussion and exchange of views. Papers were given on: the general practitioner's information requirements in prescribing; information and prescribing from the hospital doctor's viewpoint; the services of a hospital medical library; departments of clinical pharmacology and therapeutics as sources of data; hospital pharmacy information centres and their role as suppliers of information; representatives and advertisements as sources of information; and information centres in the pharmaceutical industry.

NURSING STAFF

See also Abstract Nos. 353, 379, 385, 428

358. MILLER, M. H. and FLYNN, B. C. **Current perspectives in nursing: social issues and trends.** Volume 1. St. Louis, C. V. Mosby, 1977, xii, 174pp. £6.10

This book focuses on social issues in five major topical areas of nursing; ethics, research, health care delivery, organization and education. These five areas are essential for a thorough understanding of the nursing profession, and are also the areas within which the most changes are taking place. The philosophy behind the text is that health care is a social system which may be studied on various levels, and it is the interaction of physical, psychological, sociological, professional and legal factors within these levels that influences the delivery of health care and nursing practice. There are five sections in the book covering: ethical issues; research issues; issues in health care delivery; issues in nursing organization; and educational issues within the United States.

359. SOMERS, J. B. **Purpose and performance: a system analysis of nurse staffing.** *Journal of Nursing Administration*, Wakefield, 1977, Feb., vol. 7, no. 2, pp. 4-10.

A system is an arrangement of interrelated and interdependent parts that have a common set of goals. Systems analysis is a study of the interdependent parts and their interrelationships in terms of: (i) the goals of the system; (ii) the environment in which the system operates; (iii) the resources available to the system; (iv) the tasks of the component parts of the system and the goal achievement of these parts; and (v) the management of the system. Some of the pertinent considerations to be made under these five headings in regard to nurse staffing are pointed out. It is hoped that this approach will facilitate the reader's understanding of the points as well as provide a methodology for dealing with future staffing problems.

360. HOUSE, V. **A degree of care: a study of differential perceptions and expectations of methods of preparation of the degree nurse for the profession.** London, General Nursing Council Research Unit, 1977, 2 vols.

The overall aim of the project was to establish whether different groups of nursing staff have different perceptions and expectations of degree courses and if there are

differential expectations, to assess their impact on the training process and on the longer term outcomes of this type of training/education. Data from and attitudes to three types of scheme and individual courses were examined to determine (a) the weaknesses and problems of individual courses, and (b) the weaknesses and problems of the courses as a whole. Recommendations regarding the degree courses are presented and a bibliography included.

361. INTERNATIONAL NURSING FEDERATION OF JAPAN. NURSING IN THE WORLD EDITORIAL COMMITTEE. **Nursing in the world: the needs of individual countries and their programmes.** Tokyo, International Nursing Federation of Japan, 1977, x, 359pp. $25.00

The International Nursing Foundation of Japan produced an international survey of nursing in Japanese in 1975. The English edition of this book has been produced to coincide with the opening of the 16th International Congress of Nursing in Tokyo. Aspects covered by the country by country reports include: social background; basic nursing education; training schemes and post-graduate education.

362. LUDWIG, M. Nya pedagogiska metoder i sjuksköterskeutbildningen: projektarbete, behovsorientering och informationssökning. [**New teaching methods in nurse training include project work, the provision of essential guidelines and individual research.**] *Vårdfacket*, Stockholm, 1977, June 23, vol. 1, no. 12, pp. 52-53.

On 1 July 1977, nursing training became the responsibility of the local authority High Schools. This should open the door to widened avenues of research and research-oriented learning. The author (head sister tutor in Linköping) asks whether this is what working nurses really want: whether their ambitions really comprise improved patient care, increased assistance to those doing nursing research, and replacement of ingrained patterns of work with improved ones. The risk of attempting to employ new methods of teaching is that the students become lost, do not know what is expected of them, and reject the teacher. Modern teachers would like to see the introduction of paedagogical concepts such as requirements analyses, student democracy (shared responsibility for syllabus planning and the final result), project work, and individual information retrieval, leading to greater independence of mind and action. There are, however, serious doubts whether students are interested in abandoning the traditionally passive pupil role for active involvement in the planning and study process. It is vital for sister tutors, nurses on the wards and student nurses to communicate, to understand each other, and to see each other as partners working towards a common goal—better nursing for their fellow human beings.

363. HEARN, C. R. **Nursing workload determination: development and trials of a package.** *Medical Informatics*, London, 1977, June, vol. 2, no. 2, pp. 91-109.

This paper describes a research project which is concerned with developing a tool which may be used to determine nursing work load, based on individual patient's needs as interpreted by the staff in charge of those patients. The aim is to produce a 'package' which can be used by nursing managers at various levels to determine the numbers and

grades of staff needed. The present study refers only to geriatric patients in hospital wards; it will later be extended to include patients in other specialties. The dominant factors which emerge as criteria for determining nursing work load are specified, and a parallel study on standards of care is described briefly. The patients' nursing needs are identified and recorded by the nurses in charge of the care; prescriptions of the care requirements are made daily both for the optimal and minimal standards. Further data required for the work load calculations comprise: (i) results of work measurement event items for direct care, activity sampling data for indirect and routine care; (ii) patient descriptions from the medical and nursing staff, in terms of therapeutic intent, mental, physical and social state and degree of disability; and (iii) ward profiles, describing ward layout, management policy and supporting services. The forms used are reproduced in appendices.

364. SOHLBERG, L. Gruppvård i Karlskrona: svårt att lära sig, men bra arbetsmetod. **[Group nursing experiment in the Karlskrona Hospital long-stay unit.]** *Vårdfacket*, Stockholm, 1977, July 7, no. 13, pp. 6-9.

The concept of group nursing was introduced on the newly constructed long-stay ward at Karlskrona Hospital in the spring of 1974, a new team of nurses being assembled for the purpose. There are 44 patients, divided into two groups of 14 and one of 16, although the ideal size for a group is really 10 to 12. Two of the nursing groups are directed by staff nurses and one by a nurse, all under the general leadership of the ward sister. The advantage of group nursing is that patients and nurses get to know and understand each other much better. Older nurses found it most difficult to adapt to the new method; in particular, those who had worked with the chronically sick tended to 'over-assist' their patients. Older staff were also more inclined to wait for orders from a superior and to pass them on down the heirarchy rather than accepting group responsibility for team decisions. Another difficulty which developed in the course of time was that the three teams tended to isolate themselves from each other, with very little co-operation across 'group frontiers', despite regular ward staff meetings. The Sister carries out a regular (bi-monthly) assessment of nursing work load in order to apportion the burden equally: this may have to be done monthly. Group nursing has to be learnt by everyone taking part—not least by the doctors involved, who have shown very little understanding! It *can* result in improved nursing standards and reduced length of stay in hospital. The article is illustrated with three interior photographs of the ward described.

365. REINHARDT, A. M. and QUINN, M. D. **Current practice in family-centred community nursing.** Volume 1. St. Louis, Mosby, 1977, xx, 355pp. £7.00

This book brings together a broad range of readings dealing with the current practice of community nursing in the United States illustrating behavioural science, family and community concepts and models. There are six sections covering: the challenge of practising family-centred community nursing; the influence of culture on the nurse, patient and family; understanding the family in today's rapidly changing communities; understanding community dynamics; distributive health services in the community; and the collaboration of health professionals in the community.

366. NYLEN, H.-O. and TRAAH-NORDQUIST, K. Vem informerar sjukskoterskor i oppen vard om nya mediciner? **[Who keeps the hospital nurses in out-patient care informed about new drugs?]** *Vardfacket*, Stockholm, 1977, May 27, vol. 1, no. 10, pp. 74-79.

In the autumn of 1975 an enquiry was conducted in Jemtland County into lines of communication to out-patient department nurses of information on (new) drugs and also into the nurse's role as a source of pharmaceutical information. Nurses were also asked their views about their pharmacological training and about co-operation with other departments in the hospital. One hundred and twenty four questionnaires were returned out of 158 sent out. Ninety four nurses look up FASS for their information; other out-patient nurses are asked in 45 per cent of cases; the local Medical Officer of Health is consulted by 68 per cent, and reference sources (textbooks) are consulted by 39 per cent. Only 12 per cent consult other members of the hospital staff. Two-thirds of the nurses are consulted by patients on the effects and side-effects of drugs, and rather fewer on the advisability of certain non-prescription drugs during childhood, pregnancy and breast-feeding. There was some doubt as to how patients ought best to be informed, other than by the doctor prescribing a drug. Nurses receive 44 lectures in pharmacology as part of their training; only 33 per cent of them were satisfied with the instruction given. Only three per cent of the nurses considered that co-operation with other nurses in the hospital was satisfactory. Out-patient nurses require improved information on drug questions. The local Drugs Committees are a natural means to this end, and nurses ought to be represented on them to the mutual benefit of all.

367. EASTERBROOK, B. and RUST, B. Un role nouveau pour l'infirmière: conseillère en matière d'avortement. **[A new role for the nurse: giving advice on abortions.]** *Infirmière Canadienne*, Ottawa, 1977, Oct., vol. 19, no. 10, pp. 35-37.

The authors describe their experience as abortion counsellors at Toronto General Hospital. Each patient is interviewed on admission for an abortion, and the procedure which she is about to undergo is described to her. At the same time the counsellor tries to assess what support the patient is receiving from her husband and family at this difficult time, and supplies the patient with information on contraception. Post-operatively the counsellors hold group discussions during which female anatomy and physiology, contraception, feminine sexuality, and post-abortion symptoms are considered. The counsellors feel that their work is of benefit to and appreciated by the patients.

368. BARTELS, D., GOOD, V. and LAMPE, S. Le rôle de l'infirmière chef dans les soins infirmiers de première ligne. **[The role of the sister in primary nursing.]** *Infirmière Canadienne*, Ottawa, 1977, Oct., vol. 19, no. 10, pp. 29-34.

Primary nursing means that one nurse plans the care of several patients for periods of 24 hours and herself gives this care insofar as she has the necessary skills and experience. Primary nursing implies a change of roles, responsibilities, and means of communication. The authors offer practical advice on how the ward sister can introduce and manage a primary nursing system. Introduction must be gradual and may take as long as 18 months. The sister must be freed of much of her administrative work and be able to spend most of her time with the patients. The authors suggest how she can

gradually transfer more responsibility to the individual nurse and how she can monitor and improve performance. The sister must be leader, guide, teacher, counsellor, and adviser.

OTHER PROFESSIONAL AND TECHNICAL STAFF

369. RUTENBERG. H. **Should podiatrists be members of the hospital's medical staff?** *Hospitals*, Chicago, 1977, Aug. 16, vol. 51, no. 16, pp. 85-86, 90, 92, 94.

Podiatrists are among the many allied health professions seeking staff membership and privileges in hospitals in the United States. In a 1974 survey of 7,120 active podiatrists, 3,520 reported that they had hospital privileges. This paper examines: some of the fundamental questions hospitals must consider when examining the issue; the attitudes of accreditation bodies and their guidelines, and the views of medical staff. The author anticipates that within a few years, podiatrists may be associated with most of the hospitals in the United States.

370. STEWART, R. D. **The training of paramedical personnel.** *British Journal of Anaesthesia*, London, 1977, July, vol. 49, no. 7, pp. 659-671.

This paper is concerned with pre-hospital care in emergency services; it is defined as that period of time from the patient's access to the system to the arrival at a medical facility. The evolution of emergency medical services in the last 10 years is traced, with particular reference to the evolution of mobile intensive care units staffed by specially trained technicians or paramedics. Factors to be considered in planning the training of these staff include: who should train them; length of the curriculum; content of the curriculum; methods of training; and evaluation of training. The roles of paramedics might include: initial assessment; reporting of the assessment by radio; field intervention (that is, treatment); and facilitating the entry of the patient into the medical care system. Important in their training are the skills of patient assessment (history and physical), manual techniques and the development of verbal reporting using radio communication. Such training is best carried out in a large hospital, preferably affiliated with a medical school, and should include early and frequent encounters with patients in a clinical setting.

ORGANIZATION AND ADMINISTRATION

See also Abstract Nos. 391, 435, 446

371. DESROCHES, H. B. **Breaking down barriers to shared services.** *Trustee*, Chicago, 1977, Aug., vol. 30, no. 8, pp. 34-36.

When the administrators of eight hospitals in south central Montana met to investigate and develop recommendations for the sharing of services, they produced a list of 18 obstacles that routinely block the introduction and implementation of shared services. The barriers have been numbered from one (least difficult) to 18 (most difficult). They are arranged in the following groups: emotional issues; organizational patterns; insufficient information; philosophical and organizational differences; personality conflict; time factor; geographic distance between hospitals; and loss of a facility. Actions to overcome these barriers are suggested.

372. SCHAAD, R. In Dienste der Gesundheitsdirektionen und Spitäler. **[In the service of health administrations and hospitals.]** *Veska*, Aarau, 1977, July, vol. 41, no. 7, pp. 329-332.

This is a report for 1976 (its third full working year) of the Swiss Hospital Institute. Its activities are carried out by three main departments: documentation and information; planning and construction; and management. Of the enquiries received 15.2 per cent came from various authorities, 10.9 per cent from firms, 9.1 per cent from scientific institutions, 8.5 per cent from hospitals and 5.5 per cent from nurses. Contacts were maintained with hospital institutes in other European countries. A number of interdisciplinary working parties have been set up including ones on terminology, criteria for assessing hospital plans, determining the efficiency of electronic data processing, nursing needs and super-specialization.

373. KIRTANE, M. and GRIMES, P. **Improving a hospital organization chart.** *Hospital Progress*, St. Louis, 1977, Sept., vol. 58, no. 9, pp. 85-89.

At St. Mary's Hospital, Milwaukee, an ad hoc committee was appointed to study the hospital's organization chart. The committee decided that each member be allotted some time to identify the inadequacies of the existing organizational structure. This list of 'problems' was then used to develop criteria for evaluating the 'ideal' organization structure. These criteria were: organizational cohesiveness; organizational unity; managerial span of control; organizational manageability; career ladder for department heads; and training opportunities and growth potential for assistant administrators. A diagram was developed to show the extent of interaction between the various departments. After examining various organizational modules, the committee recommended two new organizational structures to the administrator, a slightly modified operative chart and a normative chart embodying long-range objectives.

374. GIORGI, G. La direzione sanitaria: funzioni e ipotesi di strutturazione in un ospedale generale tra i 1000-1500 posti-letto. **[Health administration: functions and suggested structures in a general hospital with 1,000-1,500 beds.]** *Ospedale*, Torino, 1977, May, vol. 30, no. 5, pp. 111-116.

Italian hospital legislation attributes a multiplicity of functions to the health administrator in the hospital. These range from the formulation of advice on new developments to the execution of duties in connection with political elections and censuses of population. The author lists 31 functions and suggests how these may be delegated to: the secretariat, the statistical and health organisation office, the clinical records department, the library, dietetic service, mortuary, disinfection, disinfestation, and incinerator department, the health and social aid department, the office for organization of health services, the training schools, and the medico-legal and social security branch. He indicates how many staff will be required in each department in a 1,000-bed hospital.

375. POPKO, K. **How regulation affected two community hospitals.** *Hospital Progress*, St. Louis, 1977, Sept., vol. 58, no. 9, pp. 80-84.

This paper presents an analysis of the effects of regulation on two community hospitals (one urban and one rural) and draws some inferences on the data collected. It is

evident that as time passed and the intensity of external regulatory controls increased, the hospitals' coping strategies shifted from attempts to avoid, circumvent or prepare against regulations to an increasing emphasis on fighting in an organized way against increasing regulatory encroachment. Up to 60 per cent of the administrations' time was spent on this instead of their traditional objectives. Noticeably absent were attempts to work co-operatively with other hospitals or local planning agencies. Organizational strain was magnified because both hospitals had to modify their organizational structures to cope with the deluge of controls. Services had been terminated or reduced and budgets tightened, but neither hospitals had initiated a severe cost containment programme. However, there were indications that the administrators were moving in that direction. The implications of the findings are discussed.

ECONOMICS OF HOSPITAL MANAGEMENT

See also Abstract Nos. 405, 451

376. HESSEL, S. J. **Perspectives on benefit-cost analysis in medical care.** *American Journal of Roentgenology*, Springfield, 1977, Oct., vol. 129, no. 4, pp. 753-757.

The ever-increasing need for national health care planning has led to the application of cost-benefit analysis to diagnostic and therapeutic problems. All too often, there is a tendency to overlook the underlying premises and unique context in which a data set was derived and conclusions drawn. There are several potential problems inherent in the data base for any cost-benefit study, including: inadequate data collection; variability in patient and physician population; differing criteria of normal and abnormal; and observer variability in interpreting findings. Some problems in estimating costs and yields are examined, together with the question of whether cost-benefit analysis can be used in a clinical situation. Also discussed is the fact that life expectancy after the age of 50 has not increased in parallel with the advance in medical technology in recent years.

377. MANSER, R. and SINCLAIR, D. I. **The rational use of energy: energy conservation experience in the health service.** *Hospital Engineering*, London, 1977, Oct., vol. 31, no. 8, pp. 4-9.

This paper is an interim report to the Watt Committee on Energy by the two-man team on energy conservation experience in the health service. It deals with: (i) the management and organizational steps taken to deal with the problem; (ii) the tabulated changes in consumption over the years in question; (iii) primary deductions from the tabulated information; (iv) the research work which has been put in hand; and (v) the long-term aims. Four graphs and two tables are included.

RUNNING COSTS

See Abstract No. 387

BED OCCUPANCY, ECONOMIC USE OF BEDS

See also Abstract No. 408

378. ANDERSON, D. O. and WERTZ, M. J. **The calculation of tertiary referral hospital requirements in Vancouver.** *Canadian Journal of Public Health*, Ottawa, 1977, Sept./Oct., vol. 68, no. 5, pp. 407-413.

A method is proposed for estimating the need for tertiary, or sub-specialty, hospital beds. It was used to calculate the number of such beds required in a new paediatric hospital in Vancouver which is to replace existing paediatric beds. The method requires the deliniation of an area of large population sufficiently remote from the referral centre that it is unlikely to use the centre for non-referred or secondary referral care. Referral rates are calculated for each disease category from this population and applied to the population nearer to the centre. Length of stay is as observed for residents of the remote area, and as estimated from average length of stay for residents adjacent to the centre. Adjustment can be made to permit the calculation of the need for alternative care facilities.

379. MILLS, R. **A simple method for predicting days of increased patient census.** *Journal of Nursing Administration*, Wakefield, 1977, Feb., vol. 7, no. 2, pp. 15-20.

A method is presented of predicting the days of the month on which an extraordinary number of patients would require an increased number of nursing staff. It uses plus one standard deviation (+ 1 SD) and involves six steps: (i) break down to daily patient census for a single month into the categories for which predictions are to be made; (ii) find the mean and standard deviation for each category; (iii) for each day, add the number of patients that are above + 1 SD; (iv) repeat steps (i) and (iii), adding the results, until six consecutive months have been completed; (v) for each category determine what proportion of the patients were present on each day; and (vi) choose a cut-off point beyond which any higher number indicates the possibility of a high influx of patients. In order to reflect fluctuations in patient population, the predictor must be updated each month. Application of the method in five hospital wings with four patient types is illustrated, with the assistance of four tables and a graph.

380. HELLINGER, F. J. **Substitutability among different types of care under Medicare.** *Health Services Research*, Chicago, 1977, vol. 12, no. 1, pp. 11-18.

A simultaneous-equations model estimated by the two-stage least-squares method was used to analyse state aggregate data on hospital use by Medicare beneficiaries during 1968. The purpose was to re-examine the question of whether Medicare coverage of out-patient services, nursing home care and home care reduced the use of short-stay hospitals, and whether reduced hospital use saved Medicare money. It is argued that all alternative modes of care must be examined simultaneously for accurate results. The findings partly support and partly contradict previous studies: both out-patient and nursing home care can substitute for hospital care, but a complementary relationship between out-patient and nursing home care indicates that the additional coverage resulted in greater, not less, expenditure by Medicare.

OFFICE MANAGEMENT AND METHODS

381. **Word processing.** *Hospital Progress*, St. Louis, 1977, Sept., vol. 58, no. 9, pp. 90-98, 134.

The first of three papers in this feature, examines the word processing concept, the work simplification benefits derived from it, the elements of word processing, its

application in health care facilities, its implementation and some of the pitfalls. The second paper describes briefly the installation of word processing in three departments at the 434-bed St. Anthony's Hospital, St. Petersburg, Fla., showing that it saved time and money and boosted secretarial morale as well. The final paper describes the development of a word processing centre in the out-patient clinics of the Cleveland Clinic Foundation, where it has saved time and money and provided a career ladder for secretarial staff.

ELECTRONIC DATA PROCESSING

See also Abstract Nos. 447-448, 452, 463

382. MAHAJAN, V. and SCHOEMAN, M. E. F. **The use of computers in hospitals: an analysis of adopters and non-adopters.** *Interfaces*, Providence, 1977, May, vol. 7, no. 3, pp. 95-107.

The introduction of the computer and information management techniques has been considered by many to be a possible solution to some of the major management problems currently facing hospitals. Nevertheless, only 40 per cent of the non-federal hospitals in the United States were using computers in 1970. This survey of hospitals in Texas shows that adopters and non-adopters of computers are significantly different in terms of 32 indicators measuring the characteristics of the hospital, the environment in which it operates, and the administrator's background and training. It is possible to construct a linear combination formula relating these indicators that can be used with reasonable accuracy to predict whether a hospital is more likely to be an adopter than not. The implications of these findings are discussed.

383. EGMOND, J. van and WIEME, R. L'informatique médicale: applications au sein de l'Hôpital Universitaire de Gand. **[Medical informatics: as used in the University Hospital of Gand.]** *Hôpital Belge*, Bruxelles, 1977, July/Aug., vol. 20, no. 128, pp. 23-25.

Gand University Hospital now uses the COMPADOS computerized system for its medical records and also uses specialized packages, some of which are linked to the main computer, for the clinical laboratory, for vectocardiogram analysis and catheterisation systems, and for patient monitoring in the intensive care unit. The introduction of the records system gave rise to various problems, in particular that of convincing the doctors of its advantages, and that of confidentiality of data. The latter has been solved by having the individual doctor specify which department may have access to information relating to his patients. Patient data are encoded by the records staff, but the medical staff can interrogate the computer directly at any time. They also receive a monthly summary of discharges, length of stay, destination, and the way in which the data were recorded during the month, together with the data on each patient discharged during the month.

384. RAY, W. A., BROCKLEBANK, J. C. and FEDERSPIEL, C. F. **Computerized system for the identification of ingredients of proprietary compounds.** *American Journal of Hospital Pharmacy*, Washington, 1977, Aug., vol. 34, no. 8, pp. 847-849.

A computer system which links a code for a prescription drug product with codes for its active ingredients is described. Specialized computer programming techniques were

used to ensure a rapid system which would fit into the memory of small to medium size computers. The programs are standardized, modular and independent of the codes used for the drugs and their ingredients. Classification of the ingredients in 32,304 prescriptions paid through the Tennessee Medicaid programme required less than one minute of computer time on a Xerox Sigma 7 computer and used only nine per cent of the computer's available memory. The system has potential for use in settings where doctors frequently prescribe combination products.

385. TOLBERT, S. H. and PERTUZ, A. E. **Study shows how computerization affects nursing activities in ICU.** *Hospitals*, Chicago, 1977, Sept. 1, vol. 51, no. 17, pp. 79-82, 84.

The 12-bed cardiac post-operative recovery unit at St Mary's Hospital, Rochester, Minn., consists of four single and four double rooms which are specially designed to facilitate automated patient monitoring. Data processing and control is provided by an IBM System/7 computer used solely by the unit; duplicate files are maintained on an IBM 370/135. The hospital also has a 10-bed conventional cardiac post-operative recovery unit which is identical except that it lacks computer monitoring. The closely matched units provide almost ideal conditions for evaluating the effect of computer-based patient monitoring. In a study by a multi-disciplinary team, 8,236 individual observations were made. Automation apparently had no effect on repetitive measuring or information handling tasks. Across each shift approximately 20 to 30 fewer minutes of direct patient care are rendered in the computerized unit. Objective data in this study, unlike that of others, indicate that there is a 95 per cent probability that nurses spend from 17 to 21 per cent less time in direct patient care in the computerized unit than they do in the conventional one. Nurses' attitudes to the computerized unit were generally favourable.

ORGANIZATION AND METHODS, WORK STUDY

See also Abstract No. 363

386. KENYON, B. **Simulating hospital departments: a report on one aspect of the optimality and robustness feasibility study (1974-75) commissioned by the Department of Health and Social Security.** (MARU 2/75) London, Polytechnic of North London, Medical Architecture Research Unit, 1975, 51pp. £1.00

This is a report on one aspect of the optimality and robustness feasibility study (1974-75) commissioned by the Department of Health and Social Security. The report serves as an introduction to simulation and presents a review of simulation studies of buildings. Aspects covered include: the need to simulate hospital departments; preliminary investigations; the use of ADEPT in conjunction with simulation programs; proposed use of simulation; and anticipated problems. A bibliography of 32 items is included.

MEDICAL RECORDS

See also Abstract Nos. 383, 433, 449

387. PRESBY, L. **Eight-step study shows pros, cons of microfilming medical records.** *Hospitals*, Chicago, 1977, Aug. 16, vol. 51, no. 16, pp. 71-72, 74.

The management engineering section of Bronx-Lebanon Hospital Center, New York, conducted a feasibility study regarding continued use of microfilming of medical records. The study suggested an eight-step methodology for analysing the issue. If more than five of the following questions can be answered with 'yes', microfilming should be studied further or re-evaluated before it is initiated or continued. Is expansion of the hospital expected? According to the hospital's policy, can medical records be discarded before they are 25 years old? Is it possible to revise the shelving system? Is the retrieval rate for in-patient records or clinic records low? Is it possible to 'purge' certain records from the active file? Is it possible to rent outside storage space? Is the 'break-even' point for hard copy storage longer than 10 years? Will the hospital experience more than five of the disadvantages of microfilming which are listed?

388. SUHR-JESSEN, C. J. Sygeplejefaglig dataindsamling ved indläggelsen. **[Planning patient care should start with the collection of useful data when the patient is first admitted.]** *Sygeplejersken*, København, 1977, June 29, no. 25, pp. 4-8.

The purpose of written communication systems is to ensure the continuity of nursing. The demand for increased co-ordination and administration of nursing has led to the introduction of the Administrative Nursing Plan: a statement of the nurse's plan for the care of the individual patient, including an assessment of current state and proposals for continued care. Case reports should comprise more information on the patient as a human being, and this should be stressed from the moment of the nurse's first contact with the patient on admission. The aim of systematic data collection is to form the basis for: (i) a rapid identification of the patient's needs; (ii) the establishment of a continual nursing care plan; (iii) effective co-operation between patient, relatives and nursing staff; and (iv) patient-directed nursing care. This requires a new nursing philosophy, new methods of training, and a new attitude of equality with the (adult) patient. The collection of data is not completed with the writing of the history on admission; it must be assembled continually throughout treatment. The article is illustrated with a copy of an Administrative Nursing Care Plan card; a schematic representation of the nursing process, and a four-page nurse's patient case history form. There are 41 references (22 English).

389. TUFO, H. M. and others. **Problem-oriented approach to practice.** *Journal of the American Medical Association*, Chicago, 1977, Aug. 1, vol. 238, no. 5, pp. 414-417; Aug. 8, vol. 238, no. 6, pp. 502-505.

The Given Health Care Center was established in 1971 at the University of Vermont College of Medicine as a group practice for primary medical care for adolescents and adults. The problem-oriented system has been used to provide and assess care for the entire practice. Assessment of five years of cumulative data revealed the following changes: (i) the ratio of patients to physicians doubled; (ii) the total hospital admission rate fell by more than 20 per cent and the general medical proportion by 60 per cent; (iii) ambulatory use and cost decreased by approximately 20 per cent; and (iv) expenditures for services fell by 22 per cent, while national expenditures for physician services increased by 28 per cent. The second part of the paper describes the development of the

system, with particular reference to its use for audit purposes. It is concluded that an audited system of care, using the problem-oriented medical record as a tool, can change behaviour of providers of care and patients.

LEGAL ASPECTS OF HOSPITAL ADMINISTRATION

See also Abstract Nos. 326, 352, 375, 434

390. LUND, A. 'Aktiv arbeidsmiljøpolitikk'. **[An active policy for improving the working environment.]** *Norsk Sykehustidende*, Oslo, 1977, June/July, vol. 50, nos. 6/7, pp. 121-124, 126, 128.

Losses of earnings due to absenteeism resulting from injuries at work amount to several hundred million kroner a year. Absence due to industrial diseases, bodily wear and bad working conditions involve even greater totals, and these facts lie behind the Norwegian Government's new legislation. The aim of the Act is to strengthen employee influence on the working environment, regardless of the undertaking's financial status. The import and use of toxic substances, active accident prevention and the physical environment are covered by the Act, whose aim is to produce 100 per cent security for all workers, ensuring a meaningful working situation for the individual employee. The legal responsibility for ensuring a fully safe working environment is placed squarely on employers, who must take the necessary measures in co-operation with the workers and their organizations. The Act places great stress on organized supervisory and environmental protection activities at individual places of work. Rules and regulations defining "a fully safe working environment' will be published before the Act comes into force. The law's demands cannot be regarded as static: as soon as the unhealthiest places of work have been eliminated or improved, general standards will be raised in step with the nation's technological and social level of evolution. The main requirements now are finance, supervision, research, co-operation, information and education, accompanied by restraint in wage claims in order for society to be able to finance this dramatic increase in standards of living.

391. WOLPER, L. F. and HOPKINS, W. G. **Prospering in a regulated environment.** *Hospital Progress*, St. Louis, 1977, Sept., vol. 58, no. 9, pp. 70-79.

In order to plan for and accommodate an increasingly regulated environment, hospitals must understand legislative and regulatory history, its impact on present and future hospital operations, and how these two factors can be integrated into the design of a workable strategic planning approach. This paper is intended to integrate an understanding of regulations into a planned approach that will maximize the institution's future organizational and financial position. The approach described is not limited to hospitals of a particular size or type, nor is it applicable only to hospitals. The development of the strategy is illustrated in four diagrams.

FINANCE AND ACCOUNTING

FINANCE

See also Abstract Nos. 356, 380, 431, 436, 441

392. SEIDEL, G. Erfassung und Bewertung des Anlage-und des Umlaufvermögens zur Vorbereitung der Eröffnungsbilanz. **[Determining and assessing capital and liquid assets for the preparation of the trial balance.]** *Krankenhaus Umschau*, Kulmbach, 1977, July, vol. 46, no. 7, pp. 567-572.

The requirements of recent hospital legislation in Western Germany include the need to improve accounting systems so that they give more information about performance. This paper sets out the legal basis for general financial management as well as specifically hospital aspects. It is based on a handbook of commercial accounting for publicly-owned hospitals prepared by an inspecting authority in Bavaria. To meet present requirements double-entry bookkeeping has to be introduced and guidelines on this are given. The subject is dealt with under the following heads: assessment of hospital grounds; assessment of buildings and outside installations; other capital assets; and liquid assets.

393. FRIEDMAN, E. **Medicaid: the primrose path.** *Hospitals*, Chicago, 1977, Aug. 16, vol. 51, no. 16, pp. 51-56.

This paper outlines the provisions of Medicaid, discusses the background to and reasons for its introduction and examines some of the problems, particularly fraud and abuse, which have arisen and the attempts made to overcome them.

394. FRIEDMAN, E. and WENDORF, C. **Medicaid: a garden sown with dragon's teeth.** (Second of a series.) *Hospitals*, Chicago, 1977, Sept. 1, vol. 51, no. 17, pp. 59-64.

The costs of Medicaid have risen beyond all estimates since it was first introduced in 1967. This analysis of the situation, with particular reference to hospital services, draws the conclusion that Medicaid's rising costs are due to the product of: (i) introducing several million new patients into the health care system with a promise that their care would be paid for; (ii) the urging of an idealistic group of officials to provide the best care available; (iii) an inflation rate of approximately 80 per cent over a period of 10 years; (iv) inadequate planning by hospitals; (v) a certain amount of improper use; and (vi) a certain amount of fraud and abuse. Although these things were predictable, they have been disastrous for providers, patients and governments alike.

395. LEE DONALDSON ASSOCIATES. **UK private medical care: provident schemes statistics 1976; report for the Department of Health and Social Security,** London, Lee Donaldson Associates, 1977, 22pp. £1.00

This report presents the results of the sixth annual survey of United Kingdom Provident Associations, giving data for 1976. The Associations provide schemes of insurance cover for private medical care. Data of these Associations provide the most comprehensive source available giving an indication of the nature and order of magnitude of expenditure incurred by those who opt out of the National Health Service. The objective of the survey, commissioned by the Department of Health and Social Security is to provide some measure of the scope, size and trends in the private medical care sector. The tables analyse the 11 Provident Associations and payments; trends in Provident Associations; group and individual membership; and private medical care expenditure. A list of terms defined in the Provident Scheme Statistics and the full title and addresses of the Provident Associations studied is included.

396. Loos, J. Der Versicherungsschutz des Krankenhauses. **[Insurance cover for the hospital.]** *Krankenhaus Umschau*, Kulmbach, 1977, July, vol. 46, no. 7, pp. 560-563, 566.

The legal basis of hospital insurance in Western Germany is set out with references to the relevant acts and regulations. The subject is dealt with under two main heads: (a) insurance during the building of a hospital; and (b) insurance while the hospital is working. Under (b) there are check lists of items grouped as follows: essential administrative insurance; items with a life of three to 10 years; and items with a life of over 15 years. A distinction is drawn between obligatory and facultative (optional insurance).

SUPPLIES AND STORES

ECONOMIC USE OF SUPPLIES, DISPOSABLES

397. Campbell, I. **Disposables: a success story.** *Hospital Administration in Canada*, Don Mills, 1977, Sept., vol. 19, no. 9, pp. 40, 42.

In 1969 an 80 per cent disposable medical and surgical supplies system was introduced in Hamilton Civic Hospitals, which is the corporate entity of Hamilton General Hospital and Henderson General Hospital. From 1970 to 1975 the disposable programme increased from 80 to 90 per cent and working methods were improved. The effects of the system are outlined and a table shows staff quotas, paid hours and staff dollars for each hospital for each year from 1968 to 1969 for the stores, which now handles all disposables, and the central sterilizing room. An overall reduction of 32 staff in the stores, central sterilizing room and receiving department of the two hospitals was achieved; proposed improvements will result in a further reduction of four posts.

CATERING, DIETETICS, KITCHENS

HOSPITAL CATERING

398. Koncel, J. A. **Food service has vital role in overall hospital operations.** *Hospitals*, Chicago, 1977, Aug. 16, vol. 51, no. 16, pp. 111-114.

Catering is an important part of patient satisfaction and is one service that administrators might overlook in determining hospital priorities. The focus of this paper is the catering department as part of the overall hospital operation. A brief history of health care is followed by some concrete facts and figures about hospital catering operations. These are used to provide some insight into future trends in hospital catering. A look at recent catering actions in response to cost containment indicates that any future challenges will be met with creativity and commitment. Cook/freeze and cook/chill methods of food preparation, automated tray assembly, and computerized menu systems are already in operation in many larger hospitals. The capital needed for their introduction in smaller hospitals is not available, so the smaller hospitals look to other means of cost saving such as group purchasing and shared services. These trends are likely to continue.

DIETETICS IN THE HOSPITAL

399. TOBIAS, A. L. and ITALLIE, T. B. van. **Nutritional problems of hospitalized patients.** *Journal of the American Dietetic Association*, Chicago, 1977, Sept., vol. 71, no. 3, pp. 253-257.

In a survey of medical in-patients in an urban hospital ward, the patients' charts provided the data base for the identification and follow-up of possible nutritional problems. In the evaluation of the nutritional component of patient care the following procedures were considered: nutritional assessment, dietary orders, relevant drug orders and dietary counselling. The survey provided evidence that many basic principles of nutrition are neglected in the diagnosis and care of patients. Major omissions include failure to: obtain a dietary history when indicated; provide specific dietary management and appropriate vitamin and mineral supplementation in a variety of clinical situations; record height and weight, and give nutritional counselling. It was also found that there was no clear assignment of responsibility, the relative roles of physicians and dietitians being very poorly defined. These observations, together with reports from other workers, lead to the conclusion that physicians, dietitians and nurses have difficulty in functioning in nutritional diagnosis and management. This is due to lack of knowledge and of goals and insufficient understanding by team members of their responsibilities and these of the other team members for identifying and responding to nutritional problems and concerns.

400. SCHILLER, R. **A career mobility program in dietetics.** *Journal of the American Dietetic Association*, Chicago, 1977, Sept., vol. 71, no. 3, pp. 269-273.

This paper describes experiences in designing a curriculum based on career mobility in the dietetics programme at Mercy College of Detroit. The curriculum is in two phases: (i) a two-year technician programme with emphasis on nutritional care leading to an associate degree; and (ii) a further two years leading to a baccalaureate degree and covering management in nutritional services, clinical dietetics and community nursing. Details are given of the content of each year of the course.

401. HIRSCH, E. Z. and others. **An interdisciplinary clinical training program for dietitians.** *Journal of the American Dietetic Association*, Chicago, 1977, Feb., vol. 70, no. 2, pp. 149-156.

A new approach in teaching clinical skills to dietetic interns is described. It has been developed in the Lipid Clinic at the Veterans Administration Hospital, Cleveland. The goal of the programme is to provide a learning experience in which dietetic interns apply a clinical technique model to their client interactions, acquiring necessary skills for analysis of client information and the client interaction. Additional goals involve fostering the development of independence in planning and implementing dietary care and learning to teach these skills. The paper covers: the clinical setting; theoretical considerations for the clinic; the practical basis for the clinic; the operational model; some traps which may impede progress with the patient; dietitian's functions; limitations; evaluation of the programme; and the possible significance of this type of training.

402. WEED, J. E. and MOLLESON, A. L. **Establishing guidelines for peer review of the clinical dietitian.** *Journal of the American Dietetic Association*, Chicago, 1977, Feb., vol. 70, no. 2, pp. 157-160.

In an attempt to establish guidelines for peer review of the clinical dietitian, two areas were explored: routine biochemical and anthropometric measurements useful in assessing the nutritional status of hospital patients; and written communications used by a typical dietary staff. An instrument was developed to collect nutrition-related data from dietary and medical records. A random sample of 119 dietary cards and the corresponding medical records were used for collecting data. The findings show that biochemical and anthropometric indicators are available in the medical record, but are not being used by the dietitian to the degree expected. Recommendations are made on the measurements to be used. The dietary card appears to be the most logical focus for peer review at this time, but better documentation is needed in the areas of dietary history recording, computation of ideal weights, use of laboratory data and development of nutritional care plans.

LAUNDRIES AND LINEN SERVICE

LAUNDRIES

403. GREAT BRITAIN. DEPARTMENT OF HEALTH AND SOCIAL SECURITY AND WELSH OFFICE. **Laundry** (Health Building Note No. 25) London, Her Majesty's Stationery Office, 1977, 38pp. £1.50

This Building Note gives guidance on the design of laundries to process 55,000-250,000 articles during a 40-hour working week and which are staffed entirely by hospital employees. It replaces Hospital Building Note 25 (issued in 1964) and incorporates, where appropriate, the recommendations of the Central Health Services Council's Report 'Hospital Laundry Arrangements' (1959) and the subsequent recommendations of a report on hospital laundry arrangements by a Sub-Committee of the Medical Supplies Working Party Sterilization Group Steering Committee. Aspects covered include: scope; general planning considerations; planning and design aspects; description of accommodation; laundry plant design; description of laundry plant; engineering services; costs and other relevant information. Appendices are included covering: treatment for fouled/infected linen; schedules of accommodation and plant; and service requirements.

404. **This soiled storage and transport system has many virtues.** *Power Laundry and Cleaning News*, London, 1977, Sept. 30, pp. 18-19.

The automated washroom storage and transport system at William Harvey Hospital, Ashford, Kent, is described. Unsorted soiled linen is raised from the loading bay by two two-bag hoists to the primary storage area consisting of two tiers of 10 rails which are used for three classifications of initial sorting. From there the bags are drawn to the classified sorting platform, where a control panel having two 10-part rotary valves is used for providing rail selections. Weighing stations for up to 12 classifications have been provided; each can feed any of the six classified storage rails. Another

control box controls bag flow between the classified storage and the machine chutes. A separate system is provided for foul or infected linen. A double weighing unit is provided, each part taking a machine load of bags. From this unit, the bags are elevated to a single storage rail, from which the contents are unloaded into the machines. Four photographs of the system are included.

405. SCHAFFEL, A. W. **Flash steam recoveries in laundries.** *Hospital Engineering*, London, 1977, Oct., vol. 31. no. 8, pp. 9-12.

In the field of energy conservation it is always good policy to tackle the items that are in money terms cheap to implement and have short cash recovery times (that is, up to 12 months). The recovery of flash steam fulfils these criteria and hospital laundries are one of the biggest sources of flash steam. Most hospital laundries return high temperature condensate to a collecting tank or hot well where the waste heat flashes off to the atmosphere. This flash is easily recoverable. Three successful ways of doing it are described: (i) pre-heating the hospital hot water; (ii) heating the soap tanks; and (iii) providing the laundry with hot water from the flash. The first two had cost recovery times measured in weeks, that for the third example was 11 months.

406. MYLIUS, J. **Danish reorganisation helps promote efficient management structure for hospital laundries.** *Power Laundry and Cleaning News*, London, 1977, Aug. 5/19, pp. 23-24, 27.

The organization of health services in Denmark under the 14 counties and municipalities of Copenhagen and Frederiksborg is outlined. The Danish authorities have centralized laundry facilities for hospitals and are not totally dependent on the commercial sector. However, the authority-owned laundries are run on a commercial basis and entrepreneur managements are progressively competing with the public laundries for hospital contracts. The hospital laundry manager has a great deal more authority and responsibility than in Britain. Work received is priced to the hospitals by weight. Split level sorting and loading is considered a sufficient barrier to infection, but hygiene standards are very high. There is a high degree of standardization and variety reduction of linen. An impressive feature of Danish laundries is the machinery and mechanical handling.

HOSPITAL LINEN AND TEXTILES

See Abstract No. 409

HOSPITAL DOMESTIC MANAGEMENT

See Abstract No. 349

HYGIENE IN THE HOSPITAL

HOSPITAL INFECTIONS

407. BALLI, P. P. Le infezioni opportunistiche nell'ambiente ospedaliero. **[Opportunistic infections in the hospital environment.]** *Ospedale*, Torino, 1977, May, vol. 30, no. 5, pp. 117-126.

An opportunistic infection is one caused in a patient with an immunological deficit by a micro-organism which is not normally pathogenic. The author summarizes the

commonest pathogens in two tables, and in a third table lists the factors which predispose to opportunistic infection. He reviews the international literature on epidemiological studies in this field and discusses prophylaxis. Preventive measures should include the establishment of an infection control service, the identification and isolation of patients with an immunological deficit, high levels of hospital maintenance, high standards of disinfection and sterilization, and the careful use of antibiotics.

408. AYLIFFE, G. A. J. and others. **Surveys of hospital infection in the Birmingham region. I. Effect of age, sex, length of stay and antibiotic use on nasal carriage of tetracycline-resistant *Staphyloccus aureus* on a post-operative wound infection.** *Journal of Hygiene*, London, 1977, Oct., vol. 79, no. 2, pp. 299-314.

Cross-sectional surveys of infection in relation to ward structure and practice were made in 38 hospitals between 1967 and 1973, including repeat surveys in 12 hospitals. The methods used are described. Clinical infection (sepsis), further classified as severe, moderate or mild in accordance with a code of physical signs, was found in 6.1 per cent of clean undrained operation wounds. Drained wounds and those through hollow, heavily colonized viscera ('contaminated' wounds) had higher sepsis rates than undrained and clean wounds; there was less sepsis with closed drainage and with small drains. *Staphylococcus aureus* (24 per cent) was the most common single bacterial species, but Gram-negative bacilli (50 per cent) were found in a much larger proportion of septic wounds. The infection was lowest among patients between 20 and 40 years of age and significantly more common in male than female patients. Nasal carriage of tetracycline-resistant *Staph. aureus* was most common in geriatric patients and least common in gynaecological patients. There was correlation between nasal carriage of tetracycline-resistant staphylococci and age of patient, length of stay, sex, operative treatment, and treatment with tetracycline, ampicillin and nitrofurantoin, but not penicillin.

SOURCES OF INFECTION

409. HAMBRAEUS, A. and RANSJÖ, U. **Attempts to control clothes-borne infection in a burn unit. I. Experimental investigations of some clothes for barrier nursing.** *Journal of Hygiene*, London, 1977, Oct., vol. 79, no. 2, pp. 193-202.

Clothes-borne transmission is an important means of spread of infection from patient to patient which is not interrupted by common cotton gowns. New barrier garments were designed from spun-bonded olefin which, in particular penetration tests, was 100 times better as a filter than cotton cloth. Three designs were compared with each other and with conventional gowns in experimental exercise and nursing procedures, using *Staphylococcus aureus* from burned patients as markers. A close cover-all was four to seven times better than a loose overall or gown in preventing the soiling of clothes worn underneath it, but appeared to allow substantially more transfer from garments underneath it to a 'mock' patient and to the air than did the looser garments. A cotton gown reduced the soiling of clothes underneath it by more than 10 times and the contamination of a mock patient by more than 30 times as compared with no barrier garment. The close cover-all further diminished the con-

tamination of clothes but not transfer to the patient. The possible mechanisms for the discrepancy between particle transmission tests and experimental procedures are discussed.

PREVENTION AND CONTROL

410. PSAILA, J. V., WHEELER, M. H. and CROSBY, D. L. **The role of plastic wound drapes in the prevention of wound infection following abdominal surgery.** *British Journal of Surgery*, Bristol, 1977, Oct., vol. 64, no. 10, pp. 729-732.

In a randomized controlled trial to assess the value of plastic wound drapes in the prevention of surgical wound infection, 144 patients undergoing abdominal surgery were allocated to one of three groups: (i) a control group in which standard cloth towels were applied to the abdominal wound; (ii) a group in which an adhesive plastic drape was added; and (iii) a group in which a plastic ring protector was inserted into the wound. There were 26 cases (18 per cent) of wound infection. The wound infection rate in the plastic drape groups did not differ significantly from that in the control group. Bacteriological culture from a wound swab taken at operation was positive in 32 per cent of the cases. The presence of a plastic wound drape did not influence the positive culture rate. In 68 per cent of wounds which became infected the operative swab was positive as compared with 24 per cent in those not developing a wound infection. Thirteen of the 33 patients (39 per cent) with a positive wound subsequently developed a wound infection. In ten of these 13 cases of infection the operative swab permitted an accurate prediction of the organism responsible for the subsequent infection.

HYGIENE IN THE OPERATING THEATRE

See Abstract No. 470

STERILIZATION

411. CENTRAL STERILISING CLUB. **Clean-up.** *Health & Social Service Journal*, London, 1977, Oct. 21, vol. 87, no. 4563, pp. 1467-1474.

This feature presents extracts from papers presented to the 19th meeting of the Central Sterilising Club, together with brief reports on buzz group meetings. The topics covered include: hospital-associated urinary tract infection; methods and materials available for packaging sterile fluids; low temperature steam and formaldehyde disinfection techniques; the role of the microbiologist in infection prevention; alternative methods of drying instruments; pack identification; staff training; and catheterization.

412. WALLIS, G. **A pre-packaging system for surgical instruments.** *Middle East Health Supply and Service*, Sutton, 1977, Oct., vol. 1, no. 9, pp. 30-32.

This paper describes the development by the Royal Air Force (RAF) of a system for supplying sterile theatre instruments in packets. The system was developed at the RAF hospitals at Ely and Halton and subsequently extended to all RAF hospitals.

It has resulted in a number of important developments, including an efficient ordering service. Brief details are also given of RAF research on the hygiene of operating theatres.

SAFETY MEASURES

See Abstract Nos. 342, 352

ACCIDENTS, GENERALLY

See Abstract No. 414

ELECTRICAL ACCIDENTS

See also Abstract No. 346

413. HOSPITAL PHYSICISTS ASSOCIATION. GENERAL MEDICAL PHYSICS TOPIC GROUP and ELECTROPHYSIOLOGY TOPIC GROUP. **Guide for electrical hazards and safety standards.** (Topic Group Report No. 24.) London, Hospital Physicists Association, 1977, 9pp. £1.00

This is a working guide to recommendations for the safety of electromedical equipment, comparing the standards suggested by Hospital Technical Memorandum No. 8, Safety Code for Electromedical Apparatus and those of the Draft Standard of the International Electrotechnical Commission. Areas considered include: physiological effects of electricity; electromedical safety standards; routine testing of equipment; and test instruments and records. A select list of references is included.

414. OLEKA, M. O. **Medical hazards of static electricity.** *Hospital Engineering*, London, 1977, Sept., vol. 31, no. 7, pp. 24-26.

This article briefly discusses static electricity and the dangers of static accumulation within the hospital. The hazards peculiar to static electricity are outlined. Precautionary measures to prevent electrostatic hazards are discussed and a select list of references is included.

415. GREAT BRITAIN. DEPARTMENT OF HEALTH AND SOCIAL SECURITY and WELSH OFFICE. **Anti-static precautions: rubber, plastics and fabrics.** Revised edition. (Health Technical Memorandum No. 1.) London, Her Majesty's Stationery Office, 1977, 7pp. £0.50

This Memorandum gives guidance on anti-static precautions in hospitals. The areas covered include: the use of electro-static materials; anti-static precautions in anaesthetizing areas; plastics and fabrics, incorporating synthetic fibres for use in wards and parts of hospitals, other than anaesthetising areas; and oxygen tents. The appendix gives recommended limits of electrical resistance for anti-static items and test methods for the measurement of anti-static properties.

416. GREAT BRITAIN. DEPARTMENT OF HEALTH AND SOCIAL SECURITY and WELSH OFFICE. **Anti-static precautions: flooring in anaesthetising areas.** Revised edition. (Health Technical Memorandum No. 2.) London, Her Majesty's Stationery Office, 1977, 8pp. £0.50

This Memorandum gives guidance on anti-static floors where general anaesthetics may be given and includes details of flooring which will meet hospital requirements satisfactorily in this respect and have satisfactory wearing properties. Electrical testing methods are described and new recommendations are given on resistance limits. The marking of anti-static floors and the maintenance required are discussed. A series of references and an appendix outlining the proposed IEC Electrode and Resistance Limits are included.

ACCIDENTS IN GAS AND DRUG ADMINISTRATION

417. GREAT BRITAIN. DEPARTMENT OF HEALTH AND SOCIAL SECURITY and WELSH OFFICE. **Piped medical gases, medical compressed air and medical vacuum installations.** Revised edition. (Health Technical Memorandum No. 22.) London, Her Majesty's Stationery Office, 1977, 92pp. £4.50

This Technical Memorandum covers the design, installation, testing and maintenance of installations for the piped supply of medical gases, medical quality compressed air and medical vacuum. Aspects considered include: scope; operational considerations; main principles of safety; points of design common to most P.M.G. and V. installations; gas flow rates and pipe line design procedure; installation procedure; gas cylinder manifold installations; liquid oxygen installations; medical compressed air installations; vacuum plant installations; alarm system; electricity supply to medical gas installations; accommodation for medical gases, compressors and vacuum pumps; testing and commissioning; and maintenance. A series of appendices is included together with a list of references and an index.

PLANNING FOR MASS EMERGENCIES

418. MOLES, T. M. **Planning for major disasters.** *British Journal of Anaesthesia*, London, 1977, July, vol. 49, no. 7, pp. 643-649.

In discussing disaster planning, principally in the context of disasters seen in the United Kingdom, this paper examines: problems with major disasters; priorities in planning; initial response; medical aid at the disaster scene; hospital management; the aftermath; training; and evaluation. Major disasters provide a sudden overloading of a hospital's capacity to provide the proper quality of care for all casualties. Disaster planning seeks to minimize this overloading by ensuring specifically that those in the most urgent need receive treatment at the earliest possible time. To attain this objective it is necessary to: (i) create an appropriate command structure to take the necessary decisions; (ii) make a reconnaissance to assess the problems; and (iii) create a triage system whereby patients are dealt with according to the severity of their injuries. Attention to communications is vital if these functions are to be performed effectively. Planning must also include methods for training the staff involved, and for the evaluation of that training and of the lessons from any disaster that may occur.

RADIATION HAZARDS

419. GLANZMANN, C. Risiken und Nutzen der zivilisatorischen Anwendungen ionisierender Strahlung. **[Hazards and benefits of the peaceful uses of ionizing radiation.]** *Krankenhaus Arzt*, Karlsruhe, 1977, July, vol. 50, no. 7, pp. 644-652.

The nature and effects of ionizing radiation, with special reference to its use in medicine, are discussed under the following heads: what is ionizing radiation and how is dosage determined?; what does 'hazard' mean?; what radiation hazards are there with small or large doses?; quantitative considerations of the carcinogenic hazard of small doses; comparison of hazards and benefits—possible alternatives; natural exposure to radiation and local variations; and quantitative considerations of the genetic hazard of small doses. There are a number of illustrative charts and tables and 30 references to the relevant literature. The conclusion is that the benefits from medical uses of ionizing radiations far outweigh possible hazards but that extreme care must be taken to ensure that proper safeguards and correct techniques are employed.

420. INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION. **The handling, storage, use and disposal of unsealed radio-nuclides in hospitals and medical research establishments: a report of Committees 3 and 4 of the International Commission on Radiological Protection** (ICPR Publication 25.) Oxford, Pergamon Press, 1977, vi, 46pp. Annals of the ICRP, 1977, vol. 1, no. 2.

The International Commission on Radiological Protection has given general guidance on the precautions to be taken in the storage, handling and disposal of unsealed radioactive material in hospital and medical research establishments in therapy, diagnosis and research. Areas covered by this report include: hazards associated with radioactive sources; protection; organization and responsibility; working techniques; medical research; control of contamination and waste; storage; emergency procedures; and leakage from sealed and plated radioactive sources. Three appendices and a list of 24 references are included.

THE PATIENT

ADMISSION AND RECEPTION

See Abstract Nos. 388, 461

WELFARE OF THE PATIENT

See also Abstract Nos. 368, 399, 440, 458, 468

421. BLUESTONE, E. M. **The implications of 'failure of communication' in hospitals.** *World Hospitals*, London, 1977, vol. 13, no. 3, pp. 139-140.

The modern hospital is increasingly burdened with problems; some are thrust upon it by external forces, others originate in the premises and should be easier to solve. Outstanding among the latter is the one created by 'failure of communication',

which earlier went by the name of 'human relations', between the sick and those who serve them. Some of the reasons for this are examined. The solution outlined is the establishment, on the most generous terms, of an autonomous, but overlapping service which focuses sharply on each patient from beginning to end. To obtain the maximum value of penetrating and understandable communication, an office should be located strategically for ready access. It should be in the hands of a mature and experienced functionary who is wise in hospital lore. His task will be the tactful normalization of all communication affecting the care of the patient, and to keep it flowing.

422. SMITH, R. M. and RAE, A. **Patient comfort and radiant ceiling heating in a hospital ward.** *Building and Environment*, Oxford, 1977, vol. 12, no. 3, pp. 143-146.

As part of a programme of work to investigate the thermal comfort of patients in an actual ward situation, the study reported here sets out to establish what size of infra-red ceiling heating panels heated to surface temperatures of 45°, 50° or 60°C would be tolerated by the patients in a normally functioning ward. The tests were carried out in a five-bed room for male patients and a four-bed room for female patients in the experimental ward unit at Hairmyres Hospital. It was found that at ceiling surface temperatures of up to 50°C patients suffered no additional discomfort with angle factors, based on a parallel planes measure of up to 0.31 to the heated surface, and that ceiling surface temperatures of up to 60°C with angle factors of up to 0.12, where the air temperature was limited to 23°C, and of up to 0.31, where the air temperature was limited to 21°C, were permissible.

423. SMITH, R. B. **Patient opinions help place hospital services in perspective.** *Hospitals*, Chicago, 1977, Aug. 16, vol. 51, no. 16, pp. 65-66, 68.

A subtle but significant step in the transition of Sacramento (Calif.) Medical Center to full university teaching hospital standards was the development of an extensive programme designed to provide continual patient feedback regarding hospital and clinic services. The techniques used were: (i) providing in-patients with questionnaires to be completed during their stay (when the response was not good they were provided on discharge); (ii) simplified questionnaires and suggestion boxes in out-patient departments; (iii) telephone calls to out-patients, emergency patients and former in-patients by the two full-time patient representatives or ombudsmen; (iv) by dialling CARE on the telephone in his room a patient could have his comments recorded by the operator; and (v) a patient advisory board. The procedures for following up the information gained are outlined.

424. ROBERTS, C. M. **Doctor and patient in the teaching hospital: a tale of two life-worlds.** Lexington, Mass., D.C. Heath and Co., 1977, xviii, 141pp. £10.15

This book considers the doctor-patient relationship in a teaching hospital in the United States. The research was carried out by a medical sociologist, who had no experience of the world of hospital doctors or hospitalized patients. The aspects considered include: the method of research; the problems to be considered; and the possible solutions to the problems of doctor-patient relationships. A bibliography is included.

HOSPITAL SOCIAL WORK

See also Abstract No. 429

425. LONDON BOROUGH OF HILLINGDON. SOCIAL SERVICES DEPARTMENT. **Short stay provision in Hillingdon.** London, London Borough of Hillingdon, Social Services Department, 1977, iv, 13pp.

This paper brings together available information on existing and planned short-stay provision by both the Social Services Department and the Area Health Authority, to support families caring for clients in the community, and to illustrate the type of circumstances that arise which lead to the use of this provision. A summary is provided with case studies of short-stay places for: children; the elderly; mentally handicapped children; mentally handicapped adults; and the younger disabled and chronic sick. An appendix on legal powers is included.

426. LONDON BOROUGH OF HILLINGDON. SOCIAL SERVICES RESEARCH. **Referrals to medical social workers, January-June 1976.** Uxbridge, London Borough of Hillingdon, Social Services Research, 1977, [20]pp.

This is the first statistical record of the various types and nature of hospital referrals by the medical social workers of the social services department of the London Borough of Hillingdon. Aspects analysed include: catchment areas; age of clients; source of referral; type of referral; clinical specialities; in- or out-patient; and reason for referral. The results are tabulated.

TRANSPORT OF PATIENTS

See also Abstract Nos. 341, 457

427. SNOOK, R. **Transport of the injured patient.** *British Journal of Anaesthesia*, London, 1977, July, vol. 49, no. 7, pp. 651-658.

In considering the problems of the transport of the injured several distinct divisions may be recognized: reaching the patient; evacuating the patient to the hospital; the ambulance journey and transfer from the ambulance to the hospital. Each of these is discussed, together with the alternative of using helicopters. Various developments are considered, with particular reference to ambulance design. It is concluded that substantial progress has been made in the last decade, but the rate of progress is not all that is technically feasible because of lack of funds. Three photographs of ambulances and 41 references to the literature are included.

HOSPITAL CARE

See also Abstract Nos. 345, 364, 375, 388-389, 391, 402, 456, 459, 469

428. CLARKE, E. L. **A model of nurse staffing for effective patient care.** *Journal of Nursing Administration*, Wakefield, 1977, Feb., vol. 7, no. 2, pp. 22-27.

Studies are cited to show that nurses devote an increasing amount of their time to administrative activities to the detriment of direct patient care and that team nursing

may increase the cost of care. The nursing mission can be defined as: (i) maintaining the patient's well-being at an optimum level in conjunction with the curative process of medicine; and (ii) maintaining, strengthening, or altering the patient's perception and methods of coping with his physiological and psychological alterations. To fulfil this mission a staffing pattern is proposed that includes assigning total nursing responsibility for quality care to one nursing clinician per 20 patients. She has a 24-hour responsibility and must not be tied to any shift arrangement by management or personal preference. The system has been tested for two years and includes an educational programme of some 200 hours re-orientation and expansion of nursing concepts.

429. **The experience of death: care of the dying and the bereaved.** (Pastoral investigation of Social Trends Working Paper No. 6) Liverpool, Liverpool Institute of Socio-Religious Studies for the Conference of Major Religious Supervisors of England and Wales, 1977. £0.60

This booklet examines aspects of the needs of the dying and the services available, particularly for those whose final illness may stretch over a long period. The author describes both the changing statistical picture and administrative provisions for death and dying. Aspects considered include: attitudes to death and dying; size of the problem; causes of death and where it happens; emotional and spiritual needs of the dying; bereavement, grief and mourning; and implications of death. A list of select references is included together with lists of hospices, nursing homes, organizations and services for the bereaved and topics for discussion.

430. PLANT, J. **Various approaches proposed to assess quality in long-term care.** *Hospitals*, Chicago, 1977, Sept. 1, vol. 51, no. 17, pp. 93-94, 96-98.

The characteristics of an ideal tool for assessing the quality of long-stay care are outlined. The approaches to such assessment described and compared in this paper are: (i) patient appraisal and care evaluation (PACE) of the Department of Health, Education and Welfare, an outcome-oriented approach; (ii) the Joint Commission on Accreditation instrument, also outcome-oriented; (iii) the quality evaluation system (QES) developed at Rush-Presbyterian-St. Luke's Medical Center, Chicago, which uses process evaluation; and (iv) patient questionnaires.

431. NEWTON, A. C. **Rural health care thrives under hospital's prepaid plan.** *Hospitals*, Chicago, 1977, Aug. 1, vol. 51, no. 15, pp. 45-48.

Athol (Mass.) Memorial Hospital serves an area of 315 square miles with a population of approximately 23,000 in nine towns, the largest of which is Athol with 12,000 people. In the late 1960s the hospital began to co-ordinate all organized health care facilities in the area and to develop into a community health centre. In June 1972 the hospital obtained a federal grant to develop the North Quabbin Health Plan. It is staffed by a financial manager, co-ordinator, marketing director, secretary and clerk, working under the hospital's administrator. A consumer advisory council (with 15 to 25 members) meets monthly, as does a medical advisory council. The advantages of organizing the plan as a division of the hospital are discussed. The plan expects to have a membership of 6,000 by the end of the financial year 1977; the 'break-even' membership is estimated at 10,000. The plan has improved access, cost and use by securing services, recruiting health staff and smart marketing.

432. WOOD, T. J. and PALMER, G. R. **Medical audit: dirty words or sound practice? Report of a symposium held at the Prince of Wales Hospital, on 8 July 1975.** (Australian Studies in Health Service Administration No. 28.) New South Wales, School of Health Administration, University of New South Wales, 1976, 80pp.

This monograph is compiled from the papers presented at an all-day seminar entitled 'Medical Audit—Dirty Words or Sound Practice' held at the Prince of Wales Hospital, New South Wales, on 8 July 1975. Papers discussed include: the reasons for quality assurance programmes; the definition of a quality assurance programme; the reasons why a quality assurance programme should be conducted; current developments of computer based auditing in a radiology department; medical auditing in a gastroenterology department, and the use of data; and what should now be done. A summary and a bibliography of 20 items is included.

433. TURNER, G. P. and MAPA, J. **Auditing your way to efficiency.** *Hospital Administration in Canada*, Don Mills, 1977, Sept., vol. 19, no. 9, pp. 34-35, 38.

The use of auditing techniques in hospitals has focused primarily on medical and nursing audits; few hospitals have extended it to all professional and non-medical departments. The 608-bed Mount Sinai Hospital, Toronto, has been developing an audit programme for 25 departments; including social work, personnel, medical records, engineering, admitting and pharmacy. The initial work and continued management of the programme has been co-ordinated by a nine-member senior management committee. An audit report consists of a criteria instruction sheet, a breakdown of the findings by the auditors, and the auditors' comments and recommendations. A sample audit report from the medical record department is reproduced. Throughout the development of the programme, staff input was requested and incorporated into the programme in two ways: (i) a special sub-committee of the management conference committee was established to review, develop and organize a method to introduce and explain the programme; and (ii) the staff development officer developed and formulated the essential prerequisities of the programme in conjunction with departmental heads.

434. BLUM, J. D., GERTMAN, P. M. and RABINOW, J. **PSROs and the law.** Germantown, Md., Aspen Systems Corporation, 1977, 263pp. $17.75

This book discusses the law governing peer review in the United States. Special attention is paid to Professional Standards Review Organizations (PSROs) as most of the legal action and debate has been generated by the PSRO Scheme. Aspects considered include: the development of peer review; the PSRO law; costs and possible changes in quality of care; legal aspects of the PSRO scheme; confidentiality, medical malpractice and liability under PSROs; and the future of the Peer Review Law. A series of appendices are included together with a glossary, selected bibliography, table of cases and an index.

HOME CARE, AFTER-CARE

See Abstract Nos. 365, 425, 461, 462

SPECIAL DEPARTMENTS

435. ANDREINI, A. Il dipartimento ospedaliero. **[The hospital department.]** *Tecnica Ospedaliera*, Roma, 1977, July/Aug., vol. 7, nos. 7/8, pp. 38-44.

The author criticizes the existing organizational structure of Italian hospitals which is based on stratification of the medical staff in a rigid hierarchy and a consequent separation of diagnostic and therapeutic departments according to specialty. This structure conflicts with modern ideas which are based on an interdisciplinary, multi-specialist approach and a graduated system of care; it also conflicts with the human and social needs of both patients and staff. The author examines the texts of recent Italian laws and Ministerial decrees and shows how these provide scope for structural flexibility and the sharing of responsibility.

WARDS

See Abstract No. 422

OPERATING SUITES

See Abstract No. 470

PHARMACY

See also Abstract Nos. 357, 366, 384, 442, 452

436. NOLD, E. G. and PATHAK, D. S. **Third-party reimbursement for clinical pharmacy services: philosophy and practice.** *American Journal of Hospital Pharmacy*, Washington, 1977, Aug., vol. 34, no. 8, pp. 823-826.

A step-by-step approach is outlined for obtaining third-party reimbursement for clinical pharmacy services separate from dispensing fees. The system is used at the Ohio State University Hospitals to obtain recognition and reimbursement from Blue Cross of Central Ohio. The programme is based on a patient care philosophy rather than a cost-conscious one. The steps in the implementation of the programme were: (i) a total commitment to the patient's health; (ii) identification of patient needs that require clinical pharmacy expertise; (iii) development of a patient training programme; (iv) presentation of a written proposal to the hospital administration; (v) presentation of the proposal to third-party payers; (vi) initiation of charges for the services; and (vii) preparation of reports on the progress of the programme. Third-party reimbursement covers the cost of pharmacist instruction of home care patients receiving antihaemophilic factor, cytabarine, parenteral nutrition, calcitoninsalmon and injectable analgaesics. Financial data based on one year's experience with the programme show that savings far outweigh the charges.

437. ROBINSON, R. G. **Nuclear pharmacies: organization, administration, and the regulatory agencies.** *Applied Radiology*, Los Angeles, 1977, July/Aug., vol. 6, no. 4, pp. 162-165, 170.

The emergence of nuclear pharmacy as a discipline is outlined. Several types and levels of radiopharmaceutical services and staff are currently being developed.

Radiopharmacies in large university medical centres providing a service to smaller hospitals have shown cost savings for both. A second type of radiopharmacy, the privately owned central facility, has appeared in the last two to three years. The staffing of a typical nuclear pharmacy in a university medical centre is described. The Food and Drug Administration is keeping a watchful eye on the growth of nuclear pharmacies, while at the same time attempting to cope with the increased work load associated with the return of all radioactive drugs under its jurisdiction. It is essential that nuclear physicians, radiopharmacists, radiopharmaceutical scientists, the radiopharmaceutical industry and the Food and Drug Administration work together throughout this most interesting and dynamic phase in the growth and development of nuclear pharmacy.

438. ELENBAAS, R. M., WAECKERLE, J. F. and MCNABNEY, W. K. **The clinical pharmacist in emergency medicine.** *American Journal of Hospital Pharmacy*, Washington, 1977, Aug., vol. 34, no. 8, pp. 843-846.

A pharmacist joined the staff of the emergency department of Truman Medical Center, Kansas City, Mo., in 1974. His role includes clinical practice, education and research. In June 1976, a 14-item questionnaire was used to determine the attitudes of doctors and nurses associated with the department to the pharmacist and to clinical pharmacy in emergency care. The questionnaire was completed and returned by 72 per cent of those to whom it was sent. All respondents felt the pharmacist was an important component of the department and a benefit to patient care and educational programmes. Of the physicians, 87 per cent stated that the pharmacist is capable of offering primary care to certain patients once the diagnosis has been made by a physician, 95 per cent felt the role of the pharmacist is transferable to other emergency department facilities, and 83 per cent were willing to have their patients charged for his services.

439. MAY, F. E., FULLER, S. and STEWART, R. B. **Drug use and adverse drug reactions prior to and during hospitalization.** *Journal of the American Pharmaceutical Association*, Washington, 1977, Sept., vol. 17, no. 9, pp. 560-563, 598.

To obtain information on patients' drug use prior to admission, interviews with patients were conducted on admission to the general medical service of a teaching hospital over an eight-month period. Medication histories for 30 days prior to admission were completed on 334 (26.9 per cent) of 1,242 consecutive admissions. Average drug exposure was 6.7 drugs, including both prescription and non-prescription drugs. White women reported a significantly higher incidence of previous drug reaction and black males a significantly lower incidence. Patients with a history of drug reactions had a significantly higher number of drug reactions on admission to the hospital than those with no such history. The data indicate that long stays (over 15 days) are more likely to accompany an adverse drug reaction and short stays (0 to seven days) are associated with patients who did not experience an adverse drug reaction. Within the study group, the average hospital stay was significantly longer for patients who experienced an adverse reaction in the hospital.

440. SACKETT, D. L. and HAYNES, R. B., editors. **Compliance with therapeutic regimens.** Baltimore & London, Johns Hopkins University Press, 1976, xiv, 293pp. £12.00

This book is concerned with compliance; the extent to which the patients' behaviour coincides with the clinical prescription. Areas examined include: the magnitude, determinants and measurement of compliance; strategies for improving compliance; compliance and therapeutic trials; and recommendations for future research. An annotated bibliography and additional chapter references are included.

441. FUDGE, R. P. and VLASSES, P. H. **Third-party reimbursement for pharmacist instruction about antihemophilic factor.** *American Journal of Hospital Pharmacy*, Washington, 1977, Aug., vol. 34, no. 8, pp. 831-843.

The trial and evaluation of a pharmacy education programme to teach a 14-year haemophiliac to self-administer factor VIII at home is described. The home treatment programme realized a cost saving of $20,230 for this patient in the first year and school attendance increased by 15 per cent. The results of the trial were used to justify a professional fee from Blue Cross of Central Ohio for the pharmacist's educational services.

LABORATORIES

442. SPRAKE, J. M. **The development of quality assurance in the Trent region, England.** *Journal of Clinical Pharmacy*, Oxford, 1977, vol. 2, no. 1, pp. 17-21.

The quality control structure which is emerging in the Trent Region to meet the requirements of the Medicines Inspectorate is based on a system of area laboratories. The post of staff pharmacist (quality control) has been established in five of the seven areas. The staff pharmacists are responsible for the day-to-day area work carried out by the quality control laboratories, and for releasing raw materials and products for use. Usually there is also a competent senior technician or, in a busy manufacturing area, a basic grade pharmacist. There are two posts of principal pharmacist (quality control), one based in Sheffield and one in Nottingham, where the area laboratories are also designated as sub-regional laboratories. Responsibilities of the principal pharmacists include: co-ordinating the work carried out in the area laboratories; staff training; and co-ordinating the monitoring of medicinal products purchased on regional contract. The regional quality control working party, which consists of the regional pharmaceutical officer, principal pharmacists (quality control) and area quality controllers, meets every three or four months. Some details are given of the work done by the quality control staff.

443. CHALLAND, G. S. and others. **One year's experience with a regional hormone assay service.** *Annals of Clinical Biochemistry*, London, 1977, Sept., vol. 14, no. 5, pp. 254-257.

To provide a service in England and Wales for specialized assays, clinical chemists decided that specialized services should be organized on a three-tier system, with supraregional, regional and area laboratories. Four areas of specialization were recognized for the measurement of hormones, specific proteins, blood lead and

tissue enzymes. The Department of Clinical Biochemistry, Addenbrooke's Hospital, Cambridge, was established as a regional centre for hormone assays and formal operation started in June 1975. The assays which seemed most suitable for regional development in East Anglia were those for investigating the pituitary-gland and pituitary-thyroid axes. Most of these were introduced in the first year of operation. A specialized laboratory was not set up; instead, endocrine assays were integrated into a large service laboratory and little expenditure was needed for specialized facilities or staff. The work load of endocrine assays increased markedly during the first year of operation, but the main source of requests was local rather than regional. This lack of use by a region suggests that effective centralization of specialized assays is impracticable unless a dictatorial approach to the problem of rationalization is made at regional and area level.

444. REXEN, A. Technische Möglichkeiten der Automatisierung im Laboratorium: Klassifikation und Terminologie. **[Technical possibilities of automation in the laboratory. Classification and terminology.]** *Krankenhaus Umschau*, Kulmback, 1977, July, vol. 46, no. 7, pp. 550-555.

This paper defines the terms used in automated laboratory procedures, these include: specimen, sample, patient data, specimen data, sample data, sample processing, assay, data processing, patient identification and sample identification. The following types of programme are described: sample, method, calculating, identification, functional control and master control. A table sets out the features of an analysator (under the three heads of sample processing, information handling and programmes) and a second table shows the main features of 17 analysators on the market. The data given for each model include samples per hour, tests per hour, sample volume (in ml), whether 'flow' or 'discrete', and whether it is single or multiple method. Laboratory automation is still at an early stage of development and many analysators have disadvantages as well as advantages, consequently it will be some time before there will be objective yardsticks for comparing the real performance of the various types of analysators.

DIAGNOSTIC X-RAY DEPARTMENT

See also Abstract No. 419

445. RIEMENSCHNEIDER, P. A. **Radiology manpower update, 1976: shortage or surfeit?** *American Journal of Roentgenology*, Springfield, 1977, Oct., vol. 129, no. 4, pp. 575-582.

A questionnaire was sent to radiologists certified by the American Board of Radiology during 1972 to 1975 to determine their migration patterns from training to practice, their geographic distribution and what sort of relationship, if any, existed between special training they received and the type of work they were doing. Of 4,200 questionnaires distributed, some 1,800 were completed. The results are presented in four graphs, and 12 tables together with those of an earlier survey. In addition to geographical maldistribution, special shortage problems exist in particular segments of radiology, particularly radiotherapy, nuclear medicine, academic radiology and federal services. Suggestions are made for overcoming these particular problems.

The overall number of radiologists has changed from a shortage to a reasonable equilibrium and perhaps a temporary slight excess, but without significant efforts to maintain the number of residencies now available and without maximum recruitment efforts to fill those positions, there will be a serious shortage in the future.

446. FROMMHOLD, W. Kooperation und Koordination—interdisziplinäre Forderung an die klinische Radiologie. **[Co-operation and co-ordination—interdisciplinary demand for clinical radiology.]** *Krankenhaus Arzt*, Karlsruhe, 1977, July, vol. 50, no. 7, pp. 629-630, 632-633.

This is a plea for co-operation and co-ordination (or in a word, integration) in diagnostic radiology. In any general hospital radiology should be regarded as a specialty on its own; a system where specialties have their own X-ray departments can be uneconomic and inefficient. The central X-ray department, under qualified and experienced radiologists, makes the best use of expensive equipment and expert staff. On the other hand the radiologist must resist the tendency to be self-sufficient and must consult freely with other specialists about individual patients.

447. KATZ, A., BUDKIN, A. and SHUPLER, R. **An automated radiology information system.** *Radiology*, Easton, Pa., 1977, Sept., vol. 124, no. 3, pp. 699-704.

This paper describes the automated information system serving the diagnostic X-ray and nuclear medicine divisions of the radiology department of Miami Heart Institute, Miami Beach, Fla. The radiology applications are part of a centralized data processing operation which incorporates clinical, administrative, research and teaching subjects. The central computer is a Xerox-Honeywell Sigma 9 with 128K words of core memory, asynchronous input/output, and analog-to-digital and digital-to-analog conversion capabilities. The radiology subset includes remote on-line ordering/reporting, automated examination census and statistics, on-line audit trail/work load control program and financial reports. The radiology department has four remote terminals and three 120-character per second printers. The software is linked to other hospital applications. The system has improved report turn-around times, reduced clerical loads and provided better financial management.

448. GAUTSCHI, H. Standortbestimmung der computerisierten axialen Tomographie. **[Determining sites for computerized axial tomography (scanners).]** *Veska*, Aarau, 1977, July, vol. 41, no. 7, pp. 332-335.

The author, chairman of a working party on computerized axial tomography (scanners) set up early in 1977 by the Swiss Hospital Institute, presents a summary of the working party's report. It is estimated that a total of 11 to 15 scanner units will be required to meet the needs of Switzerland as a whole for the next three years. It should take two to three months to train doctors, and four to six weeks to train radiographers, for this work. The scanner should be used for 12 to 14 hours a day. Whole-body scanner should be located in radiology, radiotherapy or nuclear medicine departments; head scanners in radiology or neuroradiology departments. Capital costs for a head scanner are between 1.0m and 1.4m Swiss francs and for a whole-body scanner 1.5m to 1.8m Swiss francs: running costs were put at 460,600 Swiss francs a year. The average duration of the examination is 40 minutes per patient at a cost of 102 Swiss francs. Details are also given of space requirements.

RADIOTHERAPY DEPARTMENT

See Abstract No. 437

PHYSIOTHERAPY DEPARTMENT

449. FEITELBERG, S. B. **The Problem Oriented Record System in Physical Therapy.** Vermont, University of Vermont, Department of Physical Therapy, 1975, [iii], 65pp.

The application of the Problem Orientated Record System to physiotherapy is described. The system has gained wide recognition but there is controversy as to its value over the traditional medical record. The areas considered include: an overview of the system; the use of the system in a physiotherapy department; the integration of physiotherapy into the system—the defined data base, the complete problem list, the initial plan and progress sheets; and method of audit. The value and outcomes of the system are discussed. Appendices covering chart organization, abbreviations and intra-agency patient transfer forms are included together with a selected bibliography.

DEPARTMENTS FOR SPECIAL THERAPY

See also Abstract No. 409

450. BJÖRCK, S. Dialysen i Mora—minst och billigast. **[The dialysis unit at Mora Hospital—the smallest and the cheapest.]** *Vårdfacket*, Stockholm, 1977, May 27, vol. 1, no. 10, pp. 84-86.

In 1969, there were two patients in the Mora region requiring dialysis, and they had to travel to Stockholm or Uppsala twice a week (four hours each way). The medical consultant at Mora therefore installed a borrowed dialysis apparatus on a ward for three-times-a-week treatments, and 34 dialyses were given in 1969. In 1971 the county bought the equipment and granted an extension of the facility to its present two rooms (four beds in all). A team of six nurses qualified to work with the equipment has now been trained, and both staff and patients are very satisfied with the arrangement. In connection with the county's plans to extend the hospital in 1972, it was inspected by a team from the Board of Health, who discovered the unauthorized (non-centralized) dialysis facility. As a result they refused permission for the planned extension, for the purchase of an electroencephalogram, and for the further operation of the dialysis unit. A storm of public and political protest led to a gradual amendment of the official attitude, and the demand for a renal consultant to be in attendance was withdrawn. Since no research is done at the unit, and since it employs ordinary medical ward nurses rather than full-time specialist teams it runs at a cost of s.kr. 900 per patient day, compared with s.kr. 1,500 at other departments. Patients from other parts of Sweden (or abroad) on holiday in the area (about 10 a year) may also use the facility. The staff is convinced that had there been no public protest, their hospital would have been down-graded to cottage hospital status. Other county councils are now considering establishing similar facilities.

INTENSIVE CARE UNITS

See also Abstract Nos. 348, 385

451. CRETIN, S. **Cost/benefit analysis of treatment and prevention of myocardial infarction.** *Health Services Research*, Chicago, 1977, vol. 12, no. 2, pp. 174-189.

The benefits resulting from the introduction of hospital coronary care units, mobile coronary care units, and a screening and intervention programme to lower the incidence of myocardial infarction are reduced to a common basis by modelling the effects of the three strategies as applied to a cohort of 10-year old cases. Published data on myocardial infarction are used with a semi-Markov model of death from myocardial infarction and other causes to estimate programme effects on long-term survival. Cost-benefit ratios are compared over the lifetime of the cohort. In spite of limitations in the exercise, the following lessons can be drawn from it: (i) the methodology used is feasible and useful; (ii) none of the programmes is clearly preferable to the others on cost-benefit grounds; (iii) an important component of such an analysis is the determination of how society values delayed benefits; and (iv) the situation faced by policy makers is not exactly the one outlined in the paper.

SPECIAL HOSPITALS AND UNITS

OUT-PATIENT

See also Abstract No. 366

452. LIBBY, G. N. and WILKERSON, A. L. **Pharmacist answers questions about outpatient system.** *Hospitals*, Chicago, 1977, Sept. 1, vol. 51, no. 17, pp. 87-90.

At Walson Army Hospital, Fort Dix, N.J., an automated out-patient pharmacy profile system has been implemented to improve the quality and efficiency of pharmaceutical services. The system uses an IBM System 32 minicomputer to prepare prescription labels at a rapid rate and to monitor automatically up to 150 drug-drug interactions. It also maintains inventory balances for all controlled substances and keys in the name of known drug abusers so that the operator can be alerted whenever these are typed on the labels. An especially important function of the system is the formation of three selected information files: patients and their prescriptions; prescriptions written by each physician; and prescriptions for any one specific pharmaceutical. The system is leased at $1,024 per month. The paper describes how the system works; what savings result and some disadvantages. It is concluded that despite the disadvantages the system represents a significant improvement in the quality of pharmacy services.

CASUALTY AND ACCIDENT

See also Abstract Nos. 370, 438

453. MARTIN, M. **Pioneers in trauma treatment.** *Middle East Health Supply and Service*, Sutton, 1977, Oct., vol.1, no. 9, pp. 15-17.

The Birmingham Accident Hospital was founded in 1941 as the world's first accident hospital. It has pioneered the treatment of trauma and rehabilitation. This paper describes some of the current methods in accident surgery and treatment in use, there, emphasizing the team approach which is used. Brief details are also given of some of its facilities and services.

454. REVELLE, C. and others. **Facility location: a review of context-free and EMS models.** *Health Services Research*, Chicago, 1977, vol. 12, no. 2, pp. 129-146.

Private sector facilities are often located to fulfil precisely stated objectives, such as minimum cost or maximum profit. In contrast, the goals and objects of public facility location are most difficult to capture and translate into quantifiable terms. The gradually evolving interpretation of the goal of maximum public welfare has led to a number of possible problem statements in the sphere of public facility location. This paper reviews the literature on two types of public facility location model: EMS location models, formulated to consider specific problems of emergency medical systems: and context-free models, developed without reference to particular problems. The development of the maximal covering model from several earlier context-free models is described, with emphasis on problem statements and articulation of service objectives. Its ability to compare alternative solutions gives it great utility for planning and evaluating EMS systems of a wide range of complexity. Potential applications of this model to EMS problems are discussed, including multiple time standards and service objectives, location of special equipment, and siting of fixed facilities. A list of 43 references to the literature is included.

455. ASCHE, G. and SCHNEIDER, E. Erste Hilfe durch Hubschrauber-Einsatz Luftrettungsstützpunkt Frankfurt/M.: Organisation und Erfahrung. **[Emergency treatment by helicopter rescue, rescue helicopter base Frankfurt/M.: organization and experiences.]** *Fortschritte der Medizin*, München, 1977, Oct. 20, vol. 95, no. 39, pp. 2345-2346.

The first hospital helicopter service in Western Germany was inaugurated in Frankfurt on Main in 1968. At present there are 22 such services in the country with five additional ones planned. The helicopter at Frankfurt is housed in the grounds of a trade union accident hospital and the heliport is within 30 metres of the emergency department and the main hospital building. The helicopter stands ready for use at all times (it can be on its way within two minutes of the receipt of an alarm) to take doctors to accident sites and bring back patients. Between August 1972 and June 1977 a total of 4221 cases were dealt with; the maximum number of calls in one day was 12. The catchment area covers a radius of 50 to 70 km. The fact that in only two per cent of cases was it necessary to transport more than one patient at a time argues against the need for larger helicopters. An accident service without helicopters is now unthinkable in Western Germany.

456. SPASOFF, R. A., LANE, P. and STEELE, R. **Quality of care in hospital emergency departments and family physician's offices.** *Canadian Medical Association Journal*, Ottawa, 1977, Aug. 6, vol. 117, no. 3, pp. 229-232.

To evaluate and compare the quality of care in two hospital emergency departments and five family doctors' surgeries, seven indicator conditions were selected for study on the basis of their frequency in the two settings. Overall, care was considered adequate in 53 per cent of the emergency department cases and 40 per cent of the family doctors' cases, a significant difference. Referrals were very common in both settings, and when quality was assessed solely on the basis of the care actually given by the primary care providers, the difference between the two settings disappeared. Half of the observed deficiencies in care related to failure to document the findings from history-taking and physical examination. From these and earlier findings it is concluded that the emergency department can be an appropriate setting for the care of non-traumatic illness.

457. **On-the-spot service can save lives.** *Middle East Health Supply and Service*, Sutton, 1977, Oct., vol. 1, no. 9, pp. 22-24.

The mobile coronary care unit at St. Bartholomew's Hospital, London, run in conjunction with the London Ambulance Service, operates between 0900 and 1700 Monday to Friday. Though free, it is run outside the funding and control of the National Health Service, having been established with a grant from the City of London. The system depends on swiftness of action and efficient communications. The sophisticated communications system it uses is outlined in this paper. The hospital has 168 Post Office telephone lines and some 1,800 internal extensions. The Sleep system is operated from a separate system to the main switchboard and is manned by two full-time operators. The methods for dealing with major incidents are described; they include a special control vehicle which is despatched to the site of an incident.

CHILDREN

458. HALL, D. J. **Social relations and innovation: changing the state of play in hospitals.** London, Routledge & Kegan Paul, 1977, x, 222pp.

The introduction of play therapy in children's hospitals and the ways in which it is organized and introduced are discussed. The ward is considered as a social unit and the ways in which hospital staff react to deliberately informal approaches to play schemes in these wards is analysed. The degree of support or hindrance given to the scheme in terms of power relations and value orientations among the participants at ward level are assessed. The book is in three sections which cover: children and change; observations in children's wards; and power, negotiation and the maintenance of order. In conclusion comparative studies of hospitals and social organizations are discussed, and it is suggested that the present approach to the problems of child patients represents a corrective to the individualistic psychological view that has hitherto found favour in explaining why children are unhappy in hospital. A bibliography and an index are included.

GERIATRICS AND LONG-STAY

See also Abstract No. 471

459. MACKEPRANG, B. and BRAUER, E. **Changes in age and need for care among patients in a geriatric institution during a two-year period.** *Scandinavian Journal of Social Medicine*, Stockholm, 1977, vol. 5, no. 2, pp. 67-72.

Two cross-sectional studies were carried out at an interval of exactly two years at De Gamles By, Copenhagen, which accommodates about 1,400 geriatric patients. The results showed an increase in the average age of patients and a considerable increase in their need for care. An analysis of the conditions shows that the changes are due to the surviving patients becoming older and in need of more care, without adequate compensation for this trend having been taken into account when admitting new patients. The admission and staffing implications are discussed.

460. Aendringen af Gram sygehus til langtidsmedicinsk afdeling. **[Gram Hospital's changeover to a long-stay medical unit.]** *Tidsskrift for danske Sygehuse*, København, 1977, June/July, vol. 53, no. 6, pp. 111-113.

Gram Hospital (94 beds) was the smallest hospital taken over by the County of South Jutland after the recent local government reform. A large hospital was under construction in the area, and it was decided to treat medical and surgical cases at the county's other facilities. The prospect of converting Gram into a psychiatric home was discussed, but it was finally decided that the hospital should become a long-stay medical unit under Haderslev Hospital from October 1, 1975. The matron in Gram retains her post until she retires, after which the post will be down-graded to sister status. The same may apply to the engineer's post. The laundry has been closed and linen is washed in Haderslev, which also serves the Aabenraa Hospital. The county voted d.kr. 3,275,000 (£300,000) for reconstruction work and kr. 1,363,000 (£125,000) for new equipment (October 1974 prices). Total staff establishment is 103.5 persons; any staff in excess were offered jobs in Haderslev or six months' notice in lieu. Of the 267 patients treated in 1976, 91 came from their homes, 165 from hospital and 11 from nursing home. There were 230 deaths and 24 discharges. Out of 267 patients, 219 (82 per cent) were over 65. Local opposition to the closure of the hospital resulted in the retention of physiotherapy and midwifery consultation services and a limited degree of out-patient specimen-taking and X-ray check-up facilities. The article is illustrated with ground plans of the half-basement and two storeys of the new unit (architects: Boeck-Hansen and Staermose).

461. KRAUS, A. S. and ARMSTRONG, M. I. **Effect of chronic home care on admission to institutions providing long-term care.** *Canadian Medical Association Journal*, Ottawa, 1977, Oct. 8, vol. 117, no. 7, pp. 747-749.

In October 1975 the Ontario Ministry of Health added pilot chronic home care (CHC) programmes to the existing home care services in three areas, Hamilton, Kingston and Thunder Bay. In a study to determine the effect of CHC on admission to long-stay facilities, data were collected for the 218 patients admitted to the Kingston programme up to August 1976. Of these patients, 20 per cent had applied for admission to a long-stay institution before applying for CHC and another 22 per cent had seriously

considered applying to such an institution. The CHC staff considered that 61 per cent would have needed institutional care without home care. Only 12 per cent of the 218 patients left the programme to enter an institution; only one of the 48 patients discharged to self-care at home was considering a move to an institution; and only two receiving home care for six months applied to an institution during that time. CHC seems therefore to delay greatly admission to a long-stay facility for a substantial group of patients.

CANCER

See also Abstract No. 327

462. GRACE, M., MACDONALD, R. N. and DAVIS, F. **Follow-up care of patients with cancer.** *Canadian Journal of Public Health*, Ottawa, 1977, Sept./Oct., vol. 68, no. 5, pp. 403-406.

Follow-up examinations of cancer patients in Alberta have been a shared responsibility of the provincial cancer clinics (in Calgary, Edmonton and Lethbridge) and private physicians. A lack of co-ordination with other health professionals and agencies created problems. In a study of the programmes, each patient in the out-patient departments in Edmonton and Calgary was asked to complete a questionnaire; this was followed by a chart review. Main areas of concern were: the patient's reliance on a cancer clinic for follow-up; the method of follow-up preferred by patients; extent and frequency of visits to private physicians; time since patient had active disease; development of recurrent disease; and financial implications for patients and payment agencies. The results indicated that a considerable amount of money is wasted in duplication of follow-up examinations. A co-ordinated follow-up programme will reduce patient, clinic and government expenses, and free clinic oncologists for essential tasks in patient management, research and education.

CARDIOLOGY

See also Abstract Nos. 451, 457

463. WOLF, H. K., GREGOR, R. D. and CHANDLER, B. M. **Use of computers in clinical electrocardiography: an evaluation.** *Canadian Medical Association Journal*, Ottawa, 1977, Oct. 22, vol. 117, no. 8, pp. 877-880.

At present all electrocardiograms (ECGs) processed by computer are also interpreted by electrocardiographers; hence effort is duplicated. In an investigation of whether conditions can be defined under which the electrocardiographer can use the computer more profitably by eliminating some of the duplication, ECGs recorded in a university teaching hospital were processed by a computer program and subsequently reviewed by one of 10 electrocardiographers. For ECGs interpreted as showing normal sinus rhythm the rate of agreement between computer and human reviewer was 99 per cent. For those showing a normal ECG pattern (contour), the rate of direct agreement was only 88 per cent. However, the rate of occurrence of clinically significant differences was only 1.64 per cent; hence the rate of essential difference for this classification was 98.36 per cent. Therefore, in circumstances comparable to those of this investigation, it is feasible for electrocardiographers to use computers to reduce greatly their work load without compromising the quality of the service provided.

464. La cardiologie et la chirurgie cardiaque. **[Cardiology and heart surgery.]** *Hôpital à Paris*, Paris, 1977, July/Aug., no. 40, pp. 309-313, 315-348, 355-371, whole issue.

This series of seven papers is published in order to demonstrate that the *Assistance publique* in Paris is making a systematic attempt to assess the level and nature of health care requirements in the area in five to 10 years' time. The papers are: (i) first thoughts on forecasting and programming of medical activities; (ii) cardiology and cardiovascular surgery in Parisian hospitals: (a) definition and situation of the two specialties in the *Assistance publique*; (b) factors affecting changes in demand and in the organisation of care; and (c) proposals for a medium-term programme for the *Assistance publique* in Paris; (iii) definition of and standards for resuscitation and intensive care units for cardiology; (iv) creation of a rehabilitation centre for cardiac patients, and (v) organisation of a cardiac surgery department. Papers (iia,) (iib) and (iic) contain 32 tables, five graphs, and two maps.

UROLOGY

See Abstract No. 450

SURGERY

See Abstract Nos. 410, 412, 464

MATERNITY

465. SMALLEY, C. and BISSENDEN, J. **The Asian mother and baby at Sorrento.** *Journal of Maternal and Child Health*, London, 1977, Oct., vol. 2, no. 10, pp. 408, 410-412.

A comparative survey of Asian and European mothers carried out at the Sorrento Hospital, Birmingham in 1974, revealed that Asian mothers were shorter, older, almost always married, had had more children and had a higher neonatal mortality rate. In 1976, 17 per cent of Asian babies were underweight, and it was found that the majority of Asian mothers producing such babies did so because of inadequate nutrition. No racial differences were found in labour, delivery or incidence of breast-feeding, but Asian mothers tended to stay longer in hospital. In the area served by Sorrento, a proportion of both Asian and European mothers are at risk because of their socio-economic circumstances.

466. L'obstétrique. **[Obstetrics.]** *Hospitalisation Nouvelle*, Paris, 1977, Aug./Sept., no. 62, pp. 3-19, 21-30.

A series of four articles in which problems currently facing the private maternity clinic are examined. In the first, the decline in the birth rate in France is discussed and in the second, the new operational and equipment standards imposed by the Government, which place an intolerable financial burden on the clinics. The third article examines charges in these clinics: these are said to be much too low and to vary widely from one part of the country to another. It is suggested that a standard range of charges, based on a classification of the establishments, should be fixed, and that the

clinics should negotiate their charges with the sickness insurance bodies jointly, instead of individually as at present. In the fourth article the operating account of a typical maternity clinic is analysed and discussed. There are 21 tables of relevant statistics and data.

467. MALL-HAEFELI, M. Der Sozialmedizinische Dienst an der Universitäts-Frauenklinik in Basel. **[The social-medical service at the University Hospital for Women, Basle.]** *Veska*, Aarau, 1977, July, vol. 41, no. 7, pp. 314-316.

The service for social medicine at the women's department of Basel University Hospital concerns itself, on an out-patient basis, with all aspects of family planning. The work is carried out by a team of gynaecologists, psychiatrists, social workers and religious welfare workers and divides into the following sections: sex education; contraception advice; advice during early pregnancy; advice in cases of sterility; diagnosis and treatment of sexual disturbances of a medical nature; scientific research and teaching; and lectures to schools, societies, etc. A description is given of each of these activities.

468. WOLFF, E. and RITTER, S. von. Rooming-in auf der Wochenstation, Ergebnisse einer Fragebogen-Aktion. **[Rooming-in in maternity homes, results of a questionnaire.]** *Fortschritte der Medizin*, München, 1977, Oct. 13, vol. 95, no. 38, pp. 2319-2320, 2322.

At the Giessen University Hospital department of obstetrics and gynaecology maternity patients were asked, by means of a questionnaire, for their views on rooming-in. A total of 252 patients (85 out-patients who had previously had a baby and 86 who had not, and 81 in-patients) were questioned. Of the out-patients (who had not previously been aware that the hospital had just introduced a rooming-in system) 121 (71 per cent) were in favour of rooming-in and 50 (29 per cent) were against: of the in-patients 73.6 per cent were in favour. All 13 patients who had actually experienced rooming-in were in favour of it. A table shows patients grouped according to age, education, profession, complications of pregnancy or childbirth, and desire for more children. The more educated women predominated among those in favour of rooming-in. The introduction of rooming-in had met with some resistance from children's nurses who felt they were being asked to give up some of their responsibility. They would have to learn to act as advisers to the mothers.

GYNAECOLOGY

See Abstract No. 367

DENTISTRY

469. ALLRED, H. **A series of monographs on the assessment of the quality of dental care.** London, London Hospital Medical College, 1977, xi, 242pp. £10.00

The extensive work of the Experimental Dental Care Project established at the London Hospital Medical College Dental School is concerned with the development and application of methodology for measuring many of the parameters which are relevant to applied research into the quality of dental care. The six monographs provide

information on: (i) an overall assessment of the quality of dental care provided by the unit; (ii, iii) investigations into certain specific aspects of the quality of dental care; (iv) the attitudes of responses of patients receiving dental care and operators providing it; (v) an analysis of time and cost factors that apply when dental care is provided by dental teams under a variety of different circumstances; and (vi) the development, establishment and testing of various programmes and curricula for the training of dentists and ancillary staff to work together in teams. Each of the six monographs is composed of a number of parts with information outside the main theme being printed as appendices. The conclusions are collected as a separate part at the end of each monograph.

470. JOHNSTONE, R. D., WILLIS, B. A. and VAUGHAN, R. S. **The reduction of pollution: a simple approach to the reduction of pollution in the dental operating theatre.** *Anaesthesia*, Oxford, 1977, Sept., vol. 32, no. 8, pp. 790-793.

The construction and evaluation of a simple anti-pollution device for use with the McKesson nasal mask for dental anaesthesia is described. The scavenger was constructed from the case of a 60 ml. Brunswick disposable syringe. The cap was drilled to accept the threaded portion of the base of the Heidbrink-type expiratory valve of a McKesson mask. The case was cut to a length of about eight cm. and fitted to a length of tubing from a Foregger disposable anti-static breathing system. The other end of the corrugated tubing was attached to a Cardiff Aldasorber mounted on the front panel of the anaesthetic machine. In theatre use, comparing similar dental anaesthesia sessions, it resulted in a reduction of approximately 78 per cent in the mean halothane concentration at a point as far away from the expiratory valve as the faces of surgeon and anaesthetist. This percentage reduction was consistent with the weight gained by the activated charcoal container compared with the weight of halothane vapourized. Photographs of the construction of the scavenger and of the device in use are included.

471. CASAMASSIMO, P. S. and NOWAK, A. J. **Planning a preventive dentistry program for the handicapped patient in an intermediate facility.** *Rehabilitation Literature*, Chicago, 1977, Aug., vol. 38, no. 8, pp. 251-257.

Arguments are put forward for the greater participation of private practitioners in preventive dentistry programmes for handicapped patients in intermediate care facilities. This paper provides a planning model for such a programme in the form of a sequence of steps to organize, implement and evaluate a programme. In addition, it includes a matrix to serve as a guide to potential problems and possible solutions encountered in planning an institutional programme.

PSYCHIATRY

See also Abstract Nos. 336, 471

472. BOWMAN, M. J. and STURGEON, D. A. **A clinic within a general hospital for the assessment of urgent psychiatric problems.** *Lancet*, London, 1977, Nov. 19, vol. ii, pp. 1067-1068.

An urgent-assessment clinic is held twice weekly at University College Hospital, London; patients referred for urgent psychiatric assessment are seen by appointment at short notice instead of having to wait for a routine out-patient appointment. A study

of 100 consecutive referrals to the clinic showed that only a third (34 patients) were considered to warrant such urgent attention. In 29 of the 34 cases the patient's behaviour—either intent to harm himself or unpredictable behaviour that alarmed the referring agent—was the most important consideration for urgent assessment. It seems that one of the major functions of the clinic is to identify patients who are likely to respond to particular psychiatric services, and to avoid unnecessary admissions. The study also showed that many referring doctors find the significance of disturbed behaviour difficult to assess; an important function of the clinic, therefore, is to provide such assessment for general practitioners. By having students attend the clinic as part of their undergraduate course in psychiatry it is hoped that they will feel more capable of coping with the psychiatric problems they will encounter in their clinical practice.

473. DesRoches, H. B. and Hughett, B. G. **A hospital and a health center establish a group-home program.** *Hospitals*, Chicago, 1977, Aug. 16, vol. 51, no. 16, pp. 79-80.

Among the many current and diverse programmes for non-institutional care, Billings (Mon.) Deaconess Hospital and South Central Montana Regional Mental Health Center have collaborated to develop a unique group home programme. Inherent factors of the design include a residential, family living style, day treatment activities, supervision and resident self-government. The hospital provided: a large, old home; catering, supplies, maintenance and repair facilities. The centre's expertise afforded clinical case management, transport, staff training and day treatment activities. An explicit contract designating clinical, managerial and operational responsibilities was signed by both parties. The structure of the programme is outlined and some problems which have arisen are discussed. The cost per resident day for 1976/7 is approximately $15 including all food, supplies, rent and supervision, but not case management services provided by the centre. This is considerably cheaper than care in state institutions and the hospital.

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Hospital Administration in Canada, 1450 Don Mills Rd., Don Mills, Ont. M3B 2X7, Canada. $1.50
Hospital Engineering, Earlsport Publications, 33 Ludgate Hill, London EC4. £1.70
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